Assessing Beliefs About Depression and Its Treatment

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ASSESSING BELIEFS ABOUT DEPRESSION AND ITS TREATMENT

BY

ELIEZER TZVI MARGOLIS

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN PSYCHOLOGY

UNIVERSITY OF RHODE ISLAND

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This dissertation is motivated by the clinical problem of determining which of two comparably effective modes of treatment (pharmacotherapy and psychotherapy) a depressed individual would be most likely to benefit from. A cognitive variable, illness beliefs about depression, is proposed as a promising guide for making such patient-treatment mode matches.

A broad area of literature is reviewed in order to learn how beliefs about depression are and have been conceptualized, and to learn what methods, if any, have been previously used to measure them. The review begins with an examination of the prevailing cognitive paradigm and its failure to consider beliefs about depression as universalized, personal constructs that play an integral role in organizing depression-related behavior. The review includes sections on: beliefs and health and illness behavior, beliefs within the behavioral ecology of treatment for mental illness, the consequences of mental health beliefs and attributions, and beliefs as behavioral expectancies. A section on the social nature of cognition about depression highlights the conceptual grounding of the dissertation in an ethnomedical framework articulated by Kleinman (e.g., 1980). This anthropologically-influenced section also fo-
cuses heavily on the work of a British researcher, Rippere, who produced the sole significant body of work on depression-relevant beliefs which the author was able to uncover.

The first part of the dissertation culminates in the statement of an original theoretical model in which illness beliefs, as the bearers of perceived illness controllability, are postulated to mediate response to depression. This mediation process is hypothesized to occur through the modulated utilization of highly individual ensembles of different kinds of personal resources for coping with and combatting depression. Paradigms of conscious and unconscious use of these antidepressive personal resources are delineated, and an extended illustration of four distinct sequences of response to the appraised controllability of depression is provided in order to amplify some of the clinical implications of the model.

The second part of the dissertation involves the description of a psychometric project to construct a seven-point Likert-type agreement scale for measuring the ideological orientation of illness beliefs about the etiology and treatment of depression--the BADIT (Adult Survey of Beliefs About Depression and Its Treatment). Initial efforts at scale development included: a) a content validity study based on the ratings of six experts, and b) a multifaceted evaluation of the BADIT’s reliability based on the responses of a development sample of 198 college students. Following two major revisions, the final version of the BADIT consists
of four theoretical scales, having five items each. The scales (with their Cronbach internal consistency coefficients) are: Biomedical/Etiology (.72), Biomedical/Treatment (.71), Psychosocial/Etiology (.48), and Psychosocial/Treatment (.67).

In order to test some hypotheses concerning the BADIT's structural component validity (Loevinger, 1957), confirmatory maximum-likelihood factor analyses were performed using LISREL (Jöreskog & Sörbom, 1986) to evaluate and contrast the fit of eight alternative models for the measurement of illness beliefs about depression. Although in relative terms the author's theoretical four-factor model provides the best fit to the development sample data ($X^2[164, N = 198] = 344.30$), it is a substandard fit in absolute terms ($GFI = .85$).

Selected results from the empirical study of the BADIT are discussed in relation to needs for further psychometric development, and comments are offered regarding the BADIT's potential as both a clinical and research tool.
DEDICATION

To the memory of Stanley Ira Berger, Director of Clinical Training in the Department of Psychology at the University of Rhode Island from 1973 until his early death in 1984. His vision of the clinical psychologist of the future was of a more fully human person.
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My greatest debts are to my wife and children. My partner, Sunny Balsam, has worked alongside me, in a tireless and selfless manner, to create the kind of homelife which has enabled all the members of our family to flourish. In addition, the constancy of her belief in the usefulness of my work as a psychologist sustained me as nothing else could have. My boys, Max and Emil, who too frequently suffered my inattention during the past six years, provided me with moments of intense reward and joyful reprieve from the long-stretching labor which was required to complete this dissertation.

Circumstances of living made it necessary for me to pursue the generally unwise course of a long-distance dissertation. Offsetting that predicament, however, was my extreme good fortune in the amount and kinds of assistance I received. I would like to acknowledge here a number of individuals who were exceptionally forthcoming with their time, expertise, and/or encouragement:

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Dr. Fred B. Bryant, Professor of Psychology, Loyola University of Chicago, mountaineer and friend, who was as unsparing with his scarce time as he was with his unqualified endorsement, initiated me into the forbidding world of LISREL models and confirmatory factor analysis, and gave the second part of this manuscript an insightful critical reading.
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OVERVIEW

This dissertation is a three-fold study of beliefs about depression and its treatment. It encompasses (a) an extensive, integrative review of literature bearing on beliefs about depression, (b) the exposition of an original theoretical model descriptive of individual response to depression, and (c) the documentation of a psychometric project whose goal was to initiate development of a reliable, valid, and practicable clinical tool for surveying beliefs held by English-speaking, North American adults about the causes of depression and its treatment.

In its general emphases and foci of interest, the present study is cognitive-anthropological in nature. Its cognitive aspect is mainly manifest in a concentration on beliefs as the cognitive foundation of the behavioral response to depression. The dissertation is anthropological in that beliefs about depression are conceptualized in a manner which recognizes the prime role of culture in both establishing and transmitting illness beliefs.

The psychometric project is the practical expression of the author’s concern with a widespread clinical problem of matching depressed individuals with the treatment modalities from which they are likely to derive the greatest benefit. It is a problem which has assumed new dimensions in light of
recent evidence indicating that the most prevalent of these modalities, psychotherapy and pharmacotherapy, enjoy comparable efficacy in the treatment of depression\(^1\). In addition to its applied clinical significance, the psychometric project incorporates basic tenets of the author's theoretical model of belief-mediated response to depression.

The anthropological orientation of the dissertation is reflected in the single most distinguishing feature of the psychometric project, namely, that beliefs about depression are conceptualized as *illness beliefs* and stated as universalized propositions. This approach to beliefs diverges conspicuously from the current paradigm of cognitive function in depression.

The shared central premise of prevailing cognitive theories of depression is that depression is in some essential way related to the distorted processing and management of subjectively referenced information about "life", the interpersonal world, and the self. In these theories, distorted cognitions alternately assume the status of depressive pathogen, depressive symptom, and/or depressive product (Coyne & Gotlib, 1983, 1986; Guidano & Liotti, 1983; Hollon & Kriss, 1984; Segal & Shaw, 1986a, 1986b).

In contrast, the kind of cognitions which are the object of the present study are—in the words of the most prominent contributor to this area—"socially-learned norma-

\(^1\) See Chapter I, beginning on p. 5, for a discussion of this evidence.
tive ideas about depression" (Rippere, 1977b, p. 185). The perspective on cognition presented here concerns what people know, i.e., what they generally believe to be true, regarding the nature of depression. The propositional content of these beliefs provides individuals—healthy and depressed, patient and treatment provider alike—with an explanatory model (Kleinman, 1980) of depression; a model which imparts meaning to depressive experience and guides ameliorative action.

The dissertation manuscript itself is divided in two parts. The first part is devoted to establishing the clinical, historical, and theoretical background which motivated and provided a context for the development of the author’s new measure—the BADIT, the Adult Survey of Beliefs About Depression and Its Treatment. In the second part, the project to begin development of the BADIT is described in full and specific detail.

This dissertation study is intended to demonstrate both the convincing clinical value of assessing illness beliefs about depression and the general validity of the means presented here for doing so. The spirit of this intention is to bring us an increment nearer to achieving the related goals of productively researching and effectively treating clinical depression.
PART I

ILLNESS BELIEFS ABOUT DEPRESSION
CHAPTER I

THE CLINICAL CONTEXT OF THE PSYCHOMETRIC PROJECT

In this chapter, the illness beliefs assessment project is presented in the context of a specific clinical problem in the contemporary treatment of depression. The purpose here is to convey something of the full scope of that problem, while revealing the manner in which the problem motivates the dissertation study.

For more than 25 years researchers have been investigating the comparative efficacy of various psychological and somatic treatments for depression (e.g., Daneman, 1961); for nearly 15 of those years, controlled studies have looked at the effect of combining those treatments (e.g., Covi, Lipman, Derogatis, Smith, & Pattison, 1974). The earliest review of this research found that, though other forms of psychotherapy "had beneficial effects on phenomena other than depression," only one form of psychotherapy, cognitive therapy, had outperformed drug therapy in specifically relieving depressive symptoms (Hollon & Beck, 1978, p. 465). Subsequent to that review, a meta-analysis of 56 outcome studies in the treatment of adult depression found a mean effect size for psychotherapy (1.22) that was greater than
that for drug therapy (.61) (Steinbreuck, Maxwell, & Howard, 1983, p. 862). However, a later review of comparative outcome studies disparaged the results of that meta-analysis, reaching the following judgment: "The strongest conclusion that can be drawn in favor of psychotherapy is that some forms of therapy which have been specifically targeted toward depression (including behavioral, cognitive, and interpersonal interventions) have consistently performed as well as or better than tricyclic medication for outpatient depression" (Beckham & Leber, 1985, p. 327).

A confusing welter of meaningful differences in treatments, study procedures, and subject groups, have made it too difficult to achieve a consensus about the comparative efficacy of treatments for depression based on an integration and summary of the results from numerous, individual outcome studies. One group of rigorously designed and replicated studies have stood apart from this equivocal situation, however, and have demonstrated cognitive therapy's parity with tricyclic antidepressant therapy as an effective treatment for unipolar, outpatient depression (Beck, Hollon, Young, Bedrosian, & Budenz, 1985; Kovacs, Rush, Beck, & Hollon, 1981; Murphy, Simons, Wetzel, & Lustman, 1984; Simons, Murphy, Levine, & Wetzel, 1986; Rush, Beck, Kovacs, & Hollon, 1977). A recent and comprehensive review clarified the record with regard to the efficacy of combining treatments. It established that combined treatments do not appreciably
augment the benefits of either drug therapy or psychotherapy given alone (Conte, Plutchik, Wild, & Karasu, 1986).

In 1977, the National Institute of Mental Health (NIMH) began planning for a multisite, coordinated study of the psychotherapeutic treatment of nonpsychotic, depressed outpatients that was to be carried out under a specially initiated Treatment of Depression Collaborative Research Program (TDCRP, or Collaborative Study). The TDCRP was undertaken in response to frustration with the "exceedingly slow" progress of mostly unreplicated, small-scale, independently conducted research that had not produced answers to basic questions about the specific effects of psychotherapy for depression (Elkin, Parloff, Hadley, & Autrey, 1985, p. 305). The scope and sophistication of the Collaborative Study's highly controlled design were intended to free its results from confounds and constraints on generalizability which had been characteristic of prior psychotherapy research in the field. Implementing a novel, large-scale collaborative methodology was, in fact, one of the aims of the TDCRP.

When preliminary findings from the TDCRP's study of 239 patients, at three sites, were presented in May, 1986 (Elkin, et al.), it achieved an unprecedented effect. This, despite the general agreement that obtained between the Collaborative Study's results and scattered findings from 15 years of prior studies. In their preliminary report, TDCRP researchers indicated that the two forms of well-defined, brief psychotherapy (cognitive behavior therapy and inter-
personal psychotherapy) under their investigation enjoyed equivalent efficacy with a reference treatment of tricyclic antidepressant (imipramine) therapy plus clinical management. The impact of this finding earned it a front page story in the *New York Times* (Boffey, 1986), and prompted *Time* magazine to feature it in its "Behavior" section with the bold headline, "Talk Is as Good as a Pill" (Leo, 1986). Beyond its broad social impact, the Collaborative Study's initial report provided the scientific community with the kind of definitive validation of the relative efficacy of psychotherapy in the treatment of outpatient depression which had been long absent.

As befitted a scientific landmark, the Collaborative Study's initial findings redefined and reordered the research agenda regarding the treatment of depression. Applied clinical issues which had once been of concern (e.g., Billings & Moos, 1984, p. 119; McLean, 1981; Shaw, 1981), became pressing in the wake of the Collaborative Study's report. The report raised searching questions about the suitability of the therapies which patients who dropped out of treatment had been receiving. It also raised questions about patients who had done poorly with one treatment modality who might have fared better with another modality, and about those patients who had done moderately well with the treatments they received but who might have done even better with an alternate modality. These questions framed a central problem for practitioners: If psychotherapy and drug
therapy, either alone or combined, achieve roughly equivalent results, then with which modality is the individual most likely to achieve the best treatment response? And, on what basis should such a treatment assignment be made?¹

Nearly all would agree that important treatment decisions of this kind should properly be made on the basis of pertinent empirical findings. It is not clear, however, what the exact nature of that requisite knowledge base should be, whether we already possess it, how it could be developed if we do not, and where, in any case, it resides.

Of the host of variables inherent in the treatment situation, there are a number with good potential to serve as a predictive index of how a depressed person might differentially respond to one treatment modality for depression versus another. Some possible candidates are variables which have already been shown to be significantly related to treatment response in depression, such as the presence and severity of vegetative symptoms (Last, Thase, Hersen, Bellack, & Himmelhoch, 1985; Nelson & Charney, 1981), personality (Zuckerman, Prusoff, Weissman, & Padian, 1980), and a range of demographic, diagnostic, and clinical variables (Bishop, Blackburn, & McGuire, 1981; Sotsky, Glass, Shea, & Pilkonis, 1986). Other candidates would include variables

¹ Simons, Lustman, Wetzel, and Murphy should be credited for having pressed this same line of argument in a 1985 article: "For years the call has been to determine who responds best to what treatment. This job seems especially critical, given the recent findings of comparative outcome studies that fail to show that any one treatment [for depression] is consistently superior to another" (p. 88).
possessing reasonably strong face validity, such as depression-specific coping skills (Parker, Brown, & Blignault, 1986). The chief applied purpose of the present project is to put forward depressives' beliefs about depression as one of the most promising—if not the most promising—of variables to be used in matching patients to different treatment modalities for depression.

In the next chapter, the manner in which beliefs about depression have previously been conceptualized, measured, and studied will be examined in-depth. Ensuing from that review, a hypothetical model will be presented (in Chapter III) in which depressives' beliefs are postulated to play a critical role in mediating response to depression, and where applicable, to response to treatment for depression. The model provides a rationale for utilizing depressives' beliefs in matching them to treatments with optimal likely outcomes. In this way, illness beliefs about depression will be established as a theoretically valid basis for clinical decision-making in the treatment of depression.
In this chapter, I will use an integrative review of literature in order to articulate the historical context out of which the psychometric project to develop the BADIT grew. There are three principal reasons for doing this. First, I intend to show how, and the extent to which, beliefs and other forms of depression-related cognition have actually been measured in the past. Second, I intend to show how beliefs about depression have been conceptualized in the past; including, how they have been conceptualized as a factor related to treatment process and outcome. Third, I intend to show that the lack of an existing means for assessing adult beliefs about depression, i.e., one compatible with the author’s belief-mediated response model, necessitated the development of an entirely new measure.

Although an extensive review of sources disclosed only one body of literature that directly addressed the central concerns of the present study—the role of beliefs in mediating response to depression and response to treatment, and the measurement of those beliefs—a variety of types of literature were found with some illuminating connection to
those concerns. In the six sections to follow, each distinctive area of literature will receive individual attention. The particular nature and implications of the overlap of each with the inquiry at hand will be examined.

The review begins with a critique of the manner in which the role of beliefs in depression are conceptualized in the contemporary clinical literature of psychology and psychiatry, and proceeds to a review of three areas of literature which have a somewhat less direct bearing on this study. Then, after each of these partially overlapping areas of literature has been examined, two final bodies of work of special relevance will be reviewed in the fifth and sixth sections.

The fifth section covers the only two instances of research and writing that are truly germane to this study's focus. They are Rippere's research on "commonsense beliefs" about depression and antidepressive behavior (e.g., 1977d, 1980b-f), and Cane and Gotlib's article on the "prototype for depression" (1985). These works will be considered within the larger framework of anthropology's traditional occupation with beliefs. Then, by way of introducing the author's theoretical model, the sixth section will deal with beliefs as subjective behavioral expectancies, as represented in Bandura's self-efficacy theory (e.g., 1977).
SECTION A.

THE PREVAILING COGNITIVE PARADIGM

During the past 20 years or so, beliefs have achieved their greatest prominence as a clinical variable of interest in conjunction with the burgeoning of a cognitive paradigm of depression. The paradigm is represented by an assortment of theories, therapies, and research approaches embracing the fundamental tenet that cognitive processes which distort experience are a cardinal feature of depression. Despite the proliferation of disparate emphases, and a much disputed question of whether maladaptive cognitions cause (or dispose) one to become depressed, are an emergent property of depression, or are brought on in depression's wake, there is striking unanimity among proponents of the cognitive paradigm about the penetrating effects of negatively biased beliefs on mood and behavior.

For all practical purposes, the cognitive paradigm first received expression through the work of Albert Ellis, the founder of the rational-emotive school of psychotherapy (1962). Ellis accorded great importance to beliefs as the cognitive matrix through which events acquired their unique meaning for individuals; a process which determined the nature and magnitude of individuals' emotional responses to them. Furthermore, he identified irrational beliefs, and the "musturbatory ideology" [italics added] associated with
them, as the source of emotional pathology in neurotic disorders, including depression (Ellis, 1977).

"I must have sincere love and approval almost all the time from all the people I find significant" (1977, p. 12) is an example of the kind of irrational beliefs which are the focus of Ellis' work. He postulated that unfounded and absolutistic assumptions of this kind are widely subscribed to throughout the culture. He held that they cause emotional disturbance because they mandate conditions which are often not fulfilled in the lives of the people who rigidly adhere to them.

Ellis advanced a distinctly cognitive model of general psychopathology which, while favorably applied to depression, was not really specific to it. The cognitive paradigm of depression did not assume specific substance and attain a significant following until Aaron Beck, and his numerous collaborators and students, began to make their prolific

---

1 Ellis stated this same irrational belief in its universal form as "It is a dire necessity to be loved or approved of by almost everyone for virtually everything one does" (Ellis, 1970, in Sutton-Simon, 1981, p. 61). According to the rational-emotive model, irrational beliefs circulate in the culture as received folk truths. It is logical to assume, therefore, that they are promulgated in the form of universal propositions, and that once appropriated by individuals, they are particularized, i.e., internalized in personalized variants. Ellis theorized that although irrational beliefs become personalized, their essential content is not in any sense unique; this, despite the fact that individuals make use of them in an idiosyncratic fashion. Ellis regarded the content of irrational beliefs to be so universal in nature as to make it theoretically, if not practically, possible to enumerate the entire set of them. In a 1977 article, he stated that he had collected 259 of the "major self-defeating ones" (p. 14).
theoretical and investigative contributions. At the heart of those contributions was the idea that depressives have an entrenched, negative way of viewing things which is responsible for the major symptoms of depression. This negative view, it was theorized, was formed from a "negative triad" of unrealistically negative beliefs about the self, the world, and the future (Beck, 1967). The negative beliefs, in turn, were seen as arising from a number of common systematic errors in information processing, like overgeneralization and all-or-none thinking.

The activation of "cognitive schemas" was later proposed as the source of the faulty thinking that produces idiosyncratic cognitive distortion—the hallmark of depression for Beck (Beck & Shaw, 1977). Depressogenic cognitive schemas were posited as stable perceptual tendencies to organize new information, especially stimuli relevant to self-evaluation, on the basis of negatively formed concepts of past experience. They were used to explain how (the triad of) negative beliefs are instilled and then maintained in the depressed or depression-prone individual.

After Beck and his collaborators succeeded in spearheading and consolidating a paradigm of depression in which cognitive factors were preeminent, Martin Seligman and his collaborators produced a body of work which added conceptual dimension to the paradigm. Initially, Seligman developed a cognitive hypothesis to account for the behavioral deficits exhibited by animals exposed to uncontrollable events, like
inescapable electric shock (Maier & Seligman, 1976). According to his hypothesis, when an organism learns that events are uncontrollable to the extent that it comes to expect uncontrollable outcomes, then helplessness results. This hypothesis was the foundation upon which a model of depression, based on human helplessness, was built (Seligman, 1974).

After a period of vigorous investigation, however, Seligman's theory proved to be inadequate at modeling the nature of the uniquely human character of the experience of response-outcome independence, or non-contingency. As a consequence, the learned helplessness model was revised to encompass a pointedly human proclivity: "...when a person finds that he is helpless, he asks why he is helpless. The causal attribution he makes then determines the generality and chronicity of his helplessness deficits as well as his later self-esteem" (Abramson, Seligman, & Teasdale, 1978, p. 50).

Thus, the "reformulated" learned helplessness model became an attributional model of depression, centered on the kinds of beliefs individuals formulate or fall upon in order to explain to themselves events and situations which they perceive as noncontingent. In keeping with a new emphasis on causal explanations, the model specified three explanatory dimensions for causes which people attribute to undesired outcomes which are perceived as uncontrollable. Causal explanations, it was postulated, could involve fac-
tors that are stable or unstable, global or specific, and internal or external.

Human helplessness research demonstrated that what individuals typically choose to believe about the causes implicated in their successes and failures reveals a consistent "explanatory" or "attributional style" (Peterson & Seligman, 1984, 1985). Further, the reformulated model predicted that the explanatory style of individuals who attribute their failures to global, stable, and internal factors would predispose them to general and chronic helplessness depressions, entailing lowered self-esteem (Abramson, Seligman, & Teasdale, 1978, p. 68).

At present, the mushrooming of cognitive research on depression is a good indicator of the vitality of the cognitive paradigm. Some of that research has been supported by fully elaborated models, while some of it has merely introduced specialized concepts and highly focused concerns. As might be expected from the strong parallels to be found among the various models of the paradigm—including those not reviewed here—there is a considerable redundancy which is obscured by what is merely the specialized language that has evolved with development of each model and research interest.

There is an underlying unity, for instance, between Ellis' and Beck's views of the cognitive causation of emotional disturbance. That continuity is concretely reflected in the fact that Beck contributed (with a collaborator) sev-
eral chapters to Ellis & Grieger's *Handbook of Rational-Emotive Therapy* (Beck & Shaw, 1977; Shaw & Beck, 1977). In addition to this Ellis-Beck commonality, Beck's cognitive distortion model and Seligman's reformulated learned helplessness model share a primary concern with idiothetic inferential processes. These are the kind of egocentric cognitive operations individuals perform when attempting to sort out and make sense of the part they played in the things that "happened to" them.

Redundancy notwithstanding, each model and research interest has generated, along with its own vocabulary, an array of specialized assessment measures which have also received attention. Dobson & Shaw (1986) and Hammen & Krantz (1985) have conducted surveys of specialized cognitive assessments of depression, and self-report instruments have been discussed in conceptual depth by Hollon & Bemis (1981). In addition, these measures have been well represented in controlled clinical studies contrasting the major cognitive models (e.g., Bisno, Thompson, Breckenridge, & Gallagher, 1985; Eaves & Rush, 1984; Persons & Rao, 1985).

Although Ellis' model directly emphasizes beliefs as preformed entities, and the Beck and Seligman models emphasize aspects of the cognitive transactions which give rise to beliefs, all three of these models are construed in terms of beliefs. As such, assessment tools that were developed to investigate each of these major cognitive models typically measure beliefs. Similarly, it should be mentioned
that the psychotherapies grounded in each of these three models all involve engaging patients in the process of challenging the veridicality of their beliefs.

Listed below are three of the more prominent instruments for measuring the kinds of beliefs associated with the models discussed:

a) The Irrational Beliefs Test
   (Jones, 1969)
   --Ellis' rational-emotive model;
   --100 Likert-formatted agreement items;
   --beliefs as received emotional prescriptions;

b) The Dysfunctional Attitude Scale
   (Weissman, A. N., 1978)
   --Beck's cognitive distortion model;
   --40 Likert-formatted agreement items;
   --beliefs as self-percepts;

c) The Attributional Style Questionnaire
   (Peterson, C., et al., 1982)
   --Seligman et al.'s reformulated learned helplessness model;
   --12 complex items;
   --beliefs as ad hoc causal explanations.

By focusing on the role of beliefs in depression, theorists of the cognitive paradigm have had the positive effect of drawing the attention of clinical disciplines to an im-
portant aspect of depressed behavior which is not directly observable. A less desirable consequence of this focus, however, has been evident in the narrow, defining stamp the paradigm has imposed on the way beliefs have been conceptualized.

To begin with, beliefs have been construed as illness-related phenomena with virtually no conceptual scheme linking them to normal cognitive functioning. Although, the fact that such conceptual linkage has been missing is not uncommon. Essentially therapeutic models customarily stress hypotheses regarding psychopathology and give short shrift to hypotheses regarding normative functioning. What is striking, however, is that beliefs have been conceptualized, almost exclusively, as self-referent phenomena.

Cognitive assessment seems wholly taken up with cataloging all possible self-descriptions and self-referent thought processes of either depressed individuals or those hypothesized as vulnerable to depression. According to current assessment measures, it would appear that only self-referent cognition is regarded as salient in depression. Conceptual activity within the cognitive paradigm, especially thinking about beliefs, has been hobbled by a tacit premise asserting the primacy of egocentricity in depression.

While it is true that individuals find it both easy and gratifying, usually, to be self-absorbed—depressives likely more so than others—it would be a mistake to overlook the
fact that people also become quite routinely and favorably absorbed with the world which they are a part of, the world which exists, independently, beyond and around themselves. Although diverse cognitive measures do attempt to render a picture of respondents' beliefs about the world, they depict a solipsistic world.² They are not beliefs about the world, but about a world. They are beliefs about a world which is the psychological region of a single inhabitant, not the world which is occupied by all. From the beliefs registered by the various prevalent cognitive assessments, we learn only what a respondent believes is true of him or herself (i.e., what is "true for me") and nothing of what he or she believes about the nature of the world that impinges on him or her along with everyone else (i.e., what is "true for everyone").

What accounts for the restriction in the way beliefs have been conceptualized in the cognitive paradigm? Perhaps, the working of the paradigm itself. As Kuhn described it, a shared paradigm is the source of coherence that guides normal research (1970, p. 42). Researchers' collective commitment to a shared paradigm creates an efficiency which is necessary for proceeding with scientific endeavors in a climate of persistently scarce resources. There is a restrictive element to be observed as well, however. Paradigms in-

² Speaking of flaws inherent in the current cognitive revolution, Gergen pointed out that "when cognitivism is extended to its natural conclusion it reverts into an unhappy and unacceptable solipsism" (1985, p.270).
duce expectations which govern normal science (p. 53). Once a paradigm consolidates, not only will it determine the selection of problems to be solved, but the problems will be solved in terms of the paradigm from which the problems were derived. Paradigm-induced expectations, therefore, exert a kind of channeling effect, making it improbable that divergent theoretical viewpoints and conceptual frameworks will flourish within the same paradigm.

Once a cognitive paradigm of depression was established in which beliefs were conceptualized as illness-related, self-referent phenomena, a defining standard was set. This helps to explain how one readily encounters assessment measures like the Personal Beliefs Inventory (Munoz, 1977) or articles like "Assessing Belief Systems" (Sutton-Simon, 1981), in which beliefs are parochially defined in terms of the self-referent conceptualization of the prevailing paradigm, despite the fact that they bear titles which connote a much broader reference for the word 'beliefs'.

The restriction which is currently notable in the cognitive paradigm's conceptualization of beliefs may not be solely attributable to the natural history of the paradigm's development. It is also possible that the restriction may accurately reflect a common ideological investment on the part of cognitive theorists. With the exception of explicitly interactional models (e.g., Coates & Wortman, 1980; Coyne, 1976), cognitive theories of depression incline toward a psychology of insularity which imparts little signif-
icance to socially constructed, or otherwise ecological, determinants of thought and behavior. In any event, it is unclear whether the conceptual restriction noted in the paradigm has been engendered by an ideologically motivated devaluation of ecological factors or by a highly channelized line of research, induced by the paradigm itself.

What is clear is that individuals have beliefs about the ontological frame of their experience. As Kelly (1955) pointed out, people are wont to function as naive scientists. In addition to formulating beliefs about phenomena unique to themselves, they develop implicit theories about forces that have universal impact. These include beliefs about natural forces like the weather and human biology, and beliefs about social ones, like urbanization, employment conditions, and international tensions. Moreover, the propensity toward naive theorizing is guaranteed to be most pronounced with respect to matters of immediate personal relevance. In this way, people will acquire or generate propositions (beliefs) about classes of events or life predicaments which subsume their own experiences. For instance, people who live in chronic poverty are sure to have conscious, definite, and strongly held beliefs about why some people, in general, become poor while others do not. Similarly, people who are or have been in the grip of debilitating depressions are sure to have accessible beliefs about what makes people, in general, depressed, and what might be helpful to them. These universal beliefs form the
cognitive basis from which particular, i.e., self-referent, causal inferences are drawn. Nevertheless, within the cognitive paradigm now, almost no systematic effort has gone into examining the beliefs people have about the universal, natural and social phenomena which affect them, and the possible impact those beliefs have on vulnerability to depression, the idiosyncratic content of depressive phenomenology, and the response to treatment.
SECTION B.
BELIEFS AND HEALTH AND ILLNESS BEHAVIOR

The preceding section dealt with the prevailing conceptualization of beliefs in relation to clinical depression, a conceptualization unique to psychiatry. The literature reviewed in this section, takes in a much broader subject area with respect to both the clinical disciplines and target behaviors it includes. Organized under the rubric of health and illness behavior, the work reviewed here reveals an important continuity between peculiarly psychiatric issues and those of more general concern. This organization is consistent with the author's view that, in conceptualizing the overall role beliefs play in depression, it is probably useful to think in terms of the kinds of generic models of health and illness behavior which diverse psychosocial analyses have yielded. Finally, the conceptualization of beliefs analyzed in the previous section was predominantly etiological in character, with each of several cognitive models ascribing to beliefs a slightly different role in the pathogenesis of depression. The literature reviewed in this section, on the other hand, tends to be more treatment oriented in its consideration of beliefs.

The Belief-Behavior Link

Psychologists, especially social psychologists, have traditionally sought to plumb the relationship that links
beliefs to behavior. In that endeavor, beliefs have often been regarded as conditioners of, or precursors to, action (e.g., Fishbein & Ajzen, 1975). Compelled, in part, by abiding societal needs for improved universal health, a comprehensive body of health relevant research and thought has grown up around the established interest in belief-behavior relationships.

For quite some time, workers in the health field have shown significant interest in beliefs as part of a larger concern with the psychosocial aspects of physical illness and illness behavior. This concern has been distinct from, but kept pace with, the rapid growth of psychosomatic medicine since the end of the second world war (e.g., Bard & Dyk, 1956; Kasl & Cobb, 1966a, 1966b; Mechanic, 1966). Although beliefs have been incorporated in the postulation of formal explanatory models like the health belief model (Becker, 1974; Rosenstock, 1966), the dual process model (Leventhal, Safer, & Panagis, 1983), and others (reviewed by Wallston & Wallston, 1984), much of the attention beliefs have received has been desultory (e.g., Leventhal, Nerenz, & Strauss, 1982, p. 78). For the most part, concentration on the relationship of beliefs to health has been organized around the construct of personal control.

See Hendrick and Hendrick's proposal (1984) for an integrated field of health study, to be called "clinical social psychology of health and disease". They include a useful map of concepts drawn from five different research analytic systems (p. 185). It demonstrates the strong interdisciplinary character of the health studies referred to throughout this section.
Control Beliefs

Because illness symbolizes a potent source of threat to the individual, it is natural that considerable research and clinical interest should have been focused on individuals' efforts to cognitively manage that sense of threat. This is particularly true of individuals' efforts aimed at achieving or restoring a countervailing sense of personal control. Furthermore, the preoccupation with the construct of control--within the area of health--reflects the profound and pervasive impact which control theories have had, in general, on psychological thought over the past four decades or so.

As early as 1962, Seeman and Evans were able to demonstrate that the knowledge which hospitalized tuberculosis patients had about their illness, and their feelings about the process by which they acquired that knowledge, were directly related to a generalized sense of personal control. Since that time, a very large literature has grown up in which personal control beliefs have been explored in relation to a wide range of health beliefs, health related practices, and illnesses. Articles by Kirscht (1972), Taylor (1979), Seeman and Seeman (1983), Wallston, et al. (1983), Smith, Wallston, Wallston, Forsberg, and King (1984), Taylor, Lichtman, and Wood (1984), and Affleck, Tennen, Pfeiffer, and Fifield (1987), offer excellent examples of this literature, conveying the variety of ways in which the
The study of health and personal control beliefs received, perhaps, its greatest impetus from Rotter's work in social learning theory (1954), culminating in the publication of his I-E Scale for assessing the internality vs. externality of adult expectancies regarding the locus of control of reinforcements (1966; Lefcourt, 1976, 1981; Phares, 1976). The locus of control construct per se has been broadly applied to the study of health, mainly physical health (see reviews by Strickland, 1978, and Wallston & Wallston, 1978). In response, in part, to published comments on the misapplication of the construct (Rotter, 1975), health investigators refined their thinking about locus of control beliefs in order to make the application of the construct to the assessment of health behaviors and health situations more specific, and thereby, more powerful (Lau, 1982; Lau & Ware, 1981; Wallston & Wallston, 1981, 1982).

The study of locus of control beliefs has been notably applied to the area of mental health (e.g., Harrow & Ferrante, 1969; Levenson, 1973; Witt, 1978; Wood & Letak, 1982; also, included in Strickland's 1978 review). Specifically, in relation to depression, locus of control beliefs have been related to "abnormal illness behavior" in the study of depressed medically ill patients (Wise & Rosenthal, 1982), and to the desire for control in depressed college students (Burger, 1984).
Research interest in control beliefs spread beyond locus of control formulations to reflect a growing general emphasis, in the field, on processes of cognitive mediation as the wellspring of adaptive behavior (e.g., Folkman, Schaefer, & Lazarus, 1979; Taylor, 1983). This expansion fostered a more mature appreciation of the complex and heterogeneous nature of control beliefs and control-based motivation. For instance, Langer identified beliefs which induced what she described as the "illusion of control" (1975); Rothbaum, Weisz, and Snyder (1982) articulated a two-process model of perceived control which included four types of "secondary" control beliefs; and, Folkman (1984) distinguished between generalized beliefs about control and situational appraisals of control.

Through the differentiation of the control construct, the perceived controllability of depression emerged as a key source of beliefs hypothesized to affect both depressive severity (Teasdale, 1985) and compliance with antidepressive drug treatment (Bursten, 1985). This topic will be taken up to a much greater degree, later on.

As it was being fractionated, the control construct was also being extended in many ways. It was applied to investigate areas of normative function like adjustment to life change events (e.g., Suls & Mullen, 1981) and stress (e.g., Fisher, 1984). Also, health researchers attempted to tap into the sense of control experienced by very particular kinds of patient groups through the use of alternate but
conceptually related constructs like self-efficacy (e.g., Devins et al., 1982). Additionally, the idea of control was elaborated in ways which were conceptually quite divergent from the locus of control schema, as in models of self-regulation based on Eastern, i.e., Oriental (Shapiro, Jr., 1983b), as well as Western (Carver & Scheier, 1982) psychologies.

The diversification and increasing differentiation of control-based constructs fomented interest in understanding the cognitive adjustments which individuals make when they sense that they are taking part in, or have been part of, events beyond their control. As a result of this interest, serious attention began to be paid to individuals' beliefs about why things happen to them and what those beliefs—or, causal attributions—signify for their capacity to cope with both physical and psychological distress (Wortman, 1976). The influential nature of such beliefs was well illustrated in a study by Bulman and Wortman (1977) who found that the degree of self-blame in the causal attributions of 29 individuals who were permanently paralyzed as a result of accidents, predicted the quality of their efforts to cope with lasting injuries.

In addition to attributions of causality and blame, attributional beliefs about responsibility for health have

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4 It should be pointed out that this was not an altogether novel development. By 1956, Bard and Dyk had already inquired into the psychodynamic consequences of attributions regarding illness causation.
been explored. Pill and Stott (1982) examined working class Welsh mothers' beliefs about illness causation in relation to their willingness to accept responsibility for their health. Taking a broader, more theoretically integrative approach, Brickman et al. (1982) analyzed four prevalent models of help-giving and coping in American society in terms of where the locus of responsibility for problems was attributed, and what those beliefs implied for the efficacy of the coping (or helping) behavior associated with each model.

The study by Brickman et al. has much in common with a sizeable literature in which the role of attributional beliefs in psychotherapy and behavior change has been carefully examined. Those beliefs have been assessed (e.g., Norcross, Prochaska, Guadagnoli, & DiClemente, 1984; Norcross, Prochaska, & Hambrecht, 1985) and discussed from the standpoint of formal attributional theory (e.g., Försterling, 1986; Harvey & Galvin, 1984; Metalsky & Abramson, 1981, pp. 13-17), and from a perspective in which attributional beliefs have been framed according to other cognitive rubrics such as expectancies (e.g., Kazdin & Crouse, 1983) or expectations (e.g., Frank, 1962). In the same vein, LeVeck documented the signal importance of beliefs--not labeled as attributions per se--about illness causation and forms of available treatment, in a self-help association for manic-depressives (1982, pp. 246-254).
Most of the work on depressives' attributional beliefs has been approached from the point of view of the reformulation of Seligman's learned helplessness model of depression (see Abramson & Martin, 1981). As was discussed in the preceding section, those attributions were restricted to beliefs concerning idiosyncratic phenomena. Staying closer to a health research perspective, Billings and Moos (1984) discussed their findings regarding the treatment experiences of 412 unipolar depressed adults, in terms of the illness attributions of both patient and treatment provider groups. They observed that the attributional beliefs of these groups could be distinguished on the basis of whether depressions were perceived as stemming from dispositional (personality or characterological) factors or from situational ones, like recent and severe stressors (p. 129). They suggested, as Frank (1962) had done more than 20 years earlier, that incongruence between the causal illness beliefs of patients and their treatment providers leads to differing beliefs about the appropriateness of treatments to be pursued. Going further than Billings and Moos, Frank made the point that such differences often lead to the disablement of what he regarded as the indispensable vehicle of therapeutic benefit: the treatment relationship (1962, p. 11; cf. Frank, 1973).
Beliefs and Medical Compliance

The issue of treatment compliance appears to have served as a lightning rod for the study of beliefs and treatment. Viewed as a critical factor in achieving patient compliance with health regimens of all kinds, beliefs became invested with considerable practical, i.e., clinical, significance. Becker and Maiman produced an excellent review (1975), framed around the Health Belief Model, in which they examined work pertaining to sociobehavioral determinants of compliance. The connection between beliefs and the many subtle, culturally prescribed behaviors upon which compliance depends has been well studied from an anthropological perspective (e.g., Morley, 1978; Young, 1976); and within the general framework of Western medicine, the role beliefs play in determining the nature of the relationship between medical practitioners and their patients has been well examined for its effect on compliance (for a sweeping collation of this literature, see DiMatteo & DiNicola, 1982, Ch. 4-6). Not only have the medically-involved persons been studied, but the possible effect of spouses' beliefs on the health compliance behavior of their marriage partners has been studied as well (e.g., Doherty, Schrott, Metcalf, & Iasiello-Vailas, 1983).

Due to the nature of some chronic illnesses and the limited success which the medical establishment has had in dealing with them, an unusually high premium is placed on compliance with certain treatment regimens, in particular
those regimens based almost exclusively on medication. Such premiums impose special burdens on medical practitioners to appreciate the roots of treatment adherence, and to adjust their practices accordingly. In an insightful paper based on in-depth interviews with 80 chronic epileptics, Conrad (1985) argued that with these illnesses (such as epilepsy) where there is a premium on medication adherence, deviation from the prescribed regimen has been mistakenly understood from a medically-centered perspective as non-compliant behavior. He proposed, instead, that such deviations are more usefully understood from a patient-centered perspective as the outgrowth of an interweaving of patients' motives for control of their lives and their illness, their beliefs about their illness and their empirical knowledge of anti-seizure medications, and their need to manage social impression. Conrad's analysis not only puts compliance behavior in a new light, but it does so while nicely integrating the control construct and the role of illness beliefs.

In psychiatry, treatment compliance presents an especially knotty problem. The chronic administration of psychoactive medications is an essential component (necessary but not sufficient) of the only effective treatments currently available for disorders like schizophrenia and manic-depressive illness. For these disorders, therapies based on drug maintenance usually offer patients their only hope for independent community living. Other disorders also present special treatment compliance
problems. For example, unremitting major depression, severe anorexia, alcohol abuse, and borderline personality disorder, if left untreated or undertreated, can result in a variety of self-destructive behaviors, including suicide attempts. Moreover, given legal statutes which safeguard patients' rights to refuse treatment, securing a psychiatric patient's collaborative involvement with prescribed treatment is often requisite to the occurrence of any treatment at all.

Recognition-but-Neglect?

Given the potential that a variable like beliefs has for affecting a behavior of such paramount importance as compliance, a strange state of affairs seems to obtain in the clinical literature of psychiatry. There has been conspicuously little theoretically-driven or otherwise systematic investigation to elucidate the activity of beliefs in shaping illness behavior, treatment adherence, and treatment response. Nevertheless, one readily encounters allusions that accord beliefs an influential role in mediating various aspects of treatment. Not uncommonly, the tone of these allusions is axiomatic. In some cases, it appears as if the presumption of the clinical significance of beliefs is so entrenched and uncritically accepted that beliefs escape the scrutiny of researchers' overt attentions, altogether. For instance, in two often cited
reviews of treatment compliance (Baekland & Lundwall, 1975; Blackwell, 1976) the topic of beliefs is not even mentioned.

In this regard, what is characteristic of psychiatry generally is pointedly true for the study of depression. Beliefs are recognized as a clinically significant variable in the treatment of depression. For example, Simons, Levine, Lustman, and Murphy (1984) provided persuasive anecdotal confirmation of the importance of patients' beliefs in relation to their treatment. They described how 16 screened patients were excluded from their treatment of depression study because they were unable "to accept random treatment assignment to the medication alone group" (p. 171). The willingness of those 16 individuals to deny themselves access to research treatments, on the basis of the beliefs they held about one of the treatment conditions, indicates that people not only have treatment relevant beliefs but that they hold them with an impressive degree of conviction. Herceg-Baron et al. (1979) found that the acutely depressed patients in their clinical trial of pharmacotherapy and psychotherapy showed similar conviction to their beliefs about a psychotherapy alone condition (p. 323).

In a study of the differential attrition patterns of 125 women who received pharmacologic and/or psychosocial treatments for unipolar depression, Last, Thase, Hersen, Bellack, and Himmelhoch (1985) encountered a problem with pretreatment terminators which the researchers cited was similar to that found by Simons et al. (1984). Last et al.
speculated that 4 of a total of 7 patients who withdrew from their study before treatment began did so because "disappointment with not receiving a psychosocial form of therapy may have contributed to" an unwillingness to accept randomization to a pharmcotherapy only (amitriptylene) treatment condition (p. 365). It is ironic that given their report of this finding, Last et al. did not investigate beliefs of any kind in their attempt to delineate patient characteristics associated with early termination from treatment for depression (pp. 361-362).

Despite the omission of beliefs in the study by Last et al., there seems little doubt that experts on the treatment of depression concur on the general importance of treatment beliefs in establishing effective treatment. Keller et al. (1986) made the unanticipated finding that treatment providers' beliefs had impact on treatment outcome. They analyzed treatment of depression data from 338 patients in their NIMH collaborative investigation (conducted at five university centers) and found surprisingly low levels of treatment. It turned out that the particular center where subjects sought treatment was the variable with the greatest power to predict treatment results. Keller et al. reasoned that "the most influential determinants of the center effects were the beliefs and prescribing practices of the clinicians who staffed the treatment centers" (p. 465).

Such instances of explicit evidence for and endorsement of the importance of beliefs in the treatment of depression
are, however, more the exception than the rule. The more typical state of things is illustrated by a recent book devoted to examining the involvement of psychosocial variables in nonresponse to antidepressant medications. In the entire volume, there were just three sentences (consecutive ones) that indirectly alluded to the role of beliefs, by way of listing several "patient factors" and "physician attitudes" (Halbreich & Feinberg, 1986, p. 36). It exemplifies the recognition-but-neglect of the role of beliefs which prompted depression authorities Freedman and Kupfer (1986) to urge researchers to "pay systematic attention to both diagnostic and treatment variables, to both formal and informal factors [such as beliefs about treatment] affecting the transactions from which data are generated" [emphases all added] (p. 511).

Beliefs about Psychiatric Disorders, Drugs, and Treatments

The apparent neglect of beliefs, specifically in relation to depression, is striking when viewed against the broad background of psychiatric literature. Numerous studies have examined the role of beliefs in relation to psychiatric treatment. Some investigators have focused on beliefs pertinent to given diagnostic presentations, such as schizophrenia (Jones & Graybill, 1984; Soskis & Bowers, 1969; Whitman & Duffey, 1961), neuroticism (Furnham, 1984), and manic depressive illness (Targum, Dibble, Davenport, & Gershon, 1981). Other investigations have been geared to-
ward assessing beliefs about a particular drug, class of
drugs, or form of treatment, like lithium treatment
(Jamison, Gerner, & Goodwin, 1979), major tranquilizers
(Mason & Sacks, 1959), minor tranquilizers (Clinthorne,
Cisin, Balter, Mellinger, & Uhlenhuth, 1986), and
psychotherapy (Foulks, Persons, & Merkel, 1986; Frosch,
1980).

In addition to the chief emphasis identified in each of
the studies cited above, each can be differentiated ac­
cording to whose beliefs are being assessed, i.e., whether
it is the patient’s, his or her spouse’s or family members’,
the physician’s etc. Several studies have, however, been
expressly devoted to assessing American’s physicians’ and
clinicians’ general treatment and diagnostic beliefs (e.g.,
Armor & Klerman, 1968; Baker & Schulberg, 1967; Casariego &
Greden, 1978; Coryell, 1982; Horowitz, Post, French, Wallis,
& Siegelman, 1981; Houts, 1984), their beliefs about
prescribing psychotropic medications (Falk, Eisenthal, &
Erman, 1985), and their beliefs about the etiology of
schizophrenia (Gallagher, 1977; Gallagher, Jones, & Barakat,
1987).

Its useful to keep in mind that, as a general rule, the
studies cited were designed in a manner which tended to cap­
ture more than one kind of information about beliefs; so,
there is some overlap. For example, Targum, Dibble,

5 Wilkinson and Williams (1986) studied the attitudes of
British psychiatrists toward drug therapy and psychotherapy.
Davenport, and Gershon (1981) employed their Family Attitudes Questionnaire to assess patient and spouse beliefs about manic depression, while Jamison, Gerner, and Goodwin (1979) used "lengthy questionnaires" (p. 867) to assess patient and physician beliefs about lithium, the chief medical treatment for manic depression.

It is unusual that for a disorder of such notable prevalence as depression, there have been only three studies which have been directly concerned with the relationship of beliefs to the treatment of depression. Two of those studies were focused on physicians' beliefs: one study was related to a putative aid to biological diagnosis, the dexamethasone suppression test (Schrader & Durbridge, 1983), and the other to antidepressive prescribing practices (Tilley, Goldberg, Freidel, & Hamer, 1983). Only one study has addressed the issue of beliefs about depression, and it was somewhat tangential as patient beliefs were not assessed. Jacob, Frank, Kupfer, and Carpenter (1987) examined the responses of 112 significant others to the recurrent depression of spouses, friends, and family members. They employed a 20-item self-report instrument of their own making, the Family Attitudes and Beliefs Scale, in order to assess the significant others' attitudes and beliefs about the causes of their spouses', friends' and family members' particular depressions.

The very small but potentially instructive literature on depressive self-care is also lacking in any substantive
discussion of beliefs. Neither Böker, in his recent review of self-help for depression which included European sources (1986), nor Doerfler and Richards (1981), in their study of the self-initiated efforts of 13 women to cope with their depressions, considered whether or what underlying beliefs catalyzed and guided depressives in their self-help efforts.

Placebo Responses: The Unexamined Role of Beliefs

Before drawing any conclusions about the several literatures which were reviewed in this section, it is necessary to mention one further area of work in order to advance conceptual clarity on the topic of beliefs. Both general medical (or, "health") and psychiatric literatures do incorporate a traditional but wholly unexamined concern with the operation of beliefs in clinical situations. This concern is made manifest in the recognition of, and reference to, the phenomena of placebo responding. The placebo response represents the most familiar, and perhaps prototypic, instance of beliefs mediating treatment response. It is almost universally and intuitively comprehensible as a response to treatment that is driven by beliefs: beliefs about the efficaciousness of a treatment purportedly given, and about pertinent aspects of the situation in which it is given.6

6 In Chapter III, in the context of the author's theoretical model of response to depression, the idea that placebo responding belongs to a generic class of belief-mediated treatment responses is discussed in greater detail.
An examination of the manner in which beliefs have been conceptualized in the large placebo response literature has been excluded from this review because those conceptualizations were strictly implicit in nature. The foregoing review was restricted to examining only those references in which the role of beliefs, as a factor in treatment, was conceptualized intentionally and overtly. Let it suffice to note, however, that when beliefs associated with placebo responses are included with the kinds of beliefs which figured in the literatures reviewed in this section, it definitively establishes beliefs as a significant variable in the realm of treatment.

The Transfer of Research Methods

Having reviewed the several literatures included in this section, some summary findings are in order. First, it is clear that beliefs are widely recognized as a variable of broad clinical importance, multiply implicated in adjustment to illness and the maintenance of health. Second, it is evident that that recognition has come, in large part, through an appreciation of beliefs as central to the cognitive processes that are thought to mediate the state of threatened integrity induced by illness.

Third, in conceptualizing the way in which beliefs have been operative in various clinical situations, psychiatric researchers have tended to draw on existing conceptual schemes that were formulated for general medical
applications. This transfer of research models and methodology from one field of study to another is not, in itself, to be shunned; to the contrary, it is often highly desirable, as long as specialized conceptual schemes are not required to meet demands peculiar to a given field. In the present case, psychiatry (and depression research) seem to have suffered by virtue of the unusual selectivity of the transfer. It was seen that, in psychiatry, the greatest intensity of interest in beliefs—as reflected in research activity—was focused on the challenge of treatment compliance. Alternatively, from the perspective of the clinical social psychology of health and illness, the greatest intensity of interest in beliefs was focused on cognitive mediation, and in particular, on cognitive processes related to the construct of control. The transfer of research methodology, from the general health field to psychiatry, appears to have been occasioned by an urgency to find solutions to the problem of compliance.

In the semantic network of psychiatry, the concept ‘cognition’, when related to the term depression, appears to denote psychopathology. No notion implicating cognition in the process by which socially constructed meaning is imparted to the experience of depression appeared in any of several major discussions of the role of cognition in depression (Coyne & Gotlib, 1983, 1986; Huesmann, 1978; Segal & Shaw, 1986a, 1986b).
As was documented in the section on the cognitive paradigm, psychiatry has devoted much attention to the problem of depressed beliefs, or depressotypic cognition. An important feature of general health studies not transferred to psychiatry, however, has been a complementary concern with social cognition. In the case of depression, this would translate to a concern with the possible effects of beliefs about depression, as an illness, upon the natural history of depressive episodes. This would, in turn, encompass, among other things, attempts to characterize the varieties of the sick-role in depression.

As far back as 1972, Weinstein commented on the perplexing lack of general psychiatric investigations which included the objective of probing an essential determinant of mental patient behavior, patients’ beliefs about their illnesses: "It is difficult to assess exactly why there have not been more endeavors to enter the world of mental patients and understand how they interpret their illness and present social condition" (p. 38). More than 15 years later, it is surprising to note that, for a public health problem of such proportions, almost nothing has been done to fully explore depression from the point of view of the kinds of generic, social models of illness which predominate in clinical health studies outside of psychiatry.7 With the

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7 Even within the area of psychiatric problems, thoughtfully devised studies of this nature have been done (e.g., Whitt, Meile, & Larson, 1979), but none have been focused specifically on clinical depression.
exception of two articles sharing an interactional perspective on the study of depression (Cane & Gotlib, 1985; Jacob, Frank, Kupfer, & Carpenter, 1987), there have been no attempts to carefully delineate the manner in which beliefs operate as a mediating variable in terms of one of any number of the control constructs, or in terms of social cognition about depression. Consequently, the time is now ripe for the transfer, to the study of depression, the kind of methodology and thinking which has advanced general medical/health research.

A current trend in health research presents an auspicious opportunity for the transfer. The trend is to employ combinative assessments of the cognitive processes which are thought to mediate the appraisal of illness and its behavioral sequelae (cf. Janis & Rodin, 1979). A particularly good example of this combinative approach to the assessment of cognitive-personality style is offered in the research method used in a previously cited study by Taylor, Lichtman, and Wood (1984). Taylor et al. looked at both illness and responsibility attributions, as well as four different types of control beliefs in an effort to determine what kinds of social cognitions were associated with favorable adjustment to breast cancer in 78 "heavily middle to upper class" women in the Los Angeles area (p. 499). This study provides a model of the kind of methodology which could be profitably

8 These were the four types proposed by Thompson (1981): cognitive control, behavior control, information control, and retrospective control.
employed in the study of clinical depression, and other psychiatric disorders.
SECTION C.
BELIEFS WITHIN THE BEHAVIORAL ECOLOGY OF TREATMENT FOR MENTAL HEALTH

The work reviewed in this section documents the attempts of numerous investigators, employing different methodologies, to identify the beliefs and attitudes of both the public-at-large and several different patient and treatment provider groups regarding key aspects of mental health and "mental illness" and its treatment. Relative to the depression-oriented focus of the present study, there is a generality about this work which derives from the fact that specifically depressed samples have not been represented in the groups researchers have studied; nor, with the critical exception of the work of a few British researchers, have the attitudes and beliefs researched been specific to depression.

Despite its generality, the literature included in this section merits consideration for two reasons. First, it

9 This term appears in quotation marks to signify that the author finds it to be, at once, heavily laden with ambiguous cultural value and practically devoid of meaningful clinical information. During the era when most of the studies reviewed in this section were conducted, however, the term mental illness did enjoy wide and mostly noncontroversial usage; consequently, its use has been adopted here for the sake of continuity. Moreover, according to Rabkin, the term gained acceptance among sociological researchers of that era because of the operational character it acquired as a referent for psychiatric hospitalization (1975, p. 433).

10 Chief among these is Rippere, whose work, along with the work of the others, will be highlighted in a separate review which appears below (see Section E, beginning on p. 132).
displays an area of research activity in which there was, at one time, vigorous investigation of beliefs about psychiatric disorder. Second, by virtue of its very generality this literature provides essential information about (a) the total matrix of mental health beliefs and attitudes from which beliefs specifically about depression arise, and (b) the array of companion beliefs and attitudes that can operate concurrently with, and give shading to, beliefs about depression. Because this literature has an important but indirect bearing on the present study, the limited review of research appearing in this section will be focused on how beliefs about mental health and illness have been measured in the past, and on conceptual issues pertaining to the present study.

It will be useful to alert the reader, at the outset, to the decided contrast between the measures reviewed in this section and those previously mentioned. In the first two sections of this review, clinical self-report measures predominated. In the bulk of the literature reviewed here, measurements go beyond the assessment of individual subjects' self and/or state, while still querying their personal views. The object of the assessments cited here is no longer the respondent per se, but is rather something he or she has directly experienced or something about which he or she holds a belief (or toward which he or she assumes an attitude).
Segmenting the Literature

Understanding the manner in which this literature can be segmented makes it somewhat less cumbersome, and the contributions which isolated studies make toward articulating the full behavioral ecology of psychiatric treatment are, thus, more readily assimilated.

It is helpful to understand that this fundamentally sociological literature has two aspects. One is a by whom aspect which concerns different kinds of subject groupings. The other is an about what (or toward what) aspect which concerns the substance, or the topical content, of the beliefs and attitudes which are maintained by the different subject groups.

The "by whom" aspect encompasses three categories. The first of these incorporates the general population at-large: children (Weiss, 1986)\(^\text{11}\), adults, and the elderly (Hyer, 1986). The second category consists of psychiatric patients and their significant others (typically spouses and family members); it includes individuals hospitalized for mental illness. The third consists of treatment providers, professional and nonprofessional (for psychiatric nurses, see Scott & Philip, 1985), those within psychiatry's purview and those without.

The "about what" aspect of this literature falls into three topic categories. The first consists of beliefs about

\(^{11}\) The citations given in this paragraph are for sources referring to groups not specifically discussed elsewhere in the text.
abstract notions such as mental illness, and abstract institutions such as psychiatry, psychiatric treatment, and mental hospital treatment. The second category consists of attitudes toward and evaluations of specific features of psychiatric hospitalization falling within respondents' direct experience, such as attitudes toward actual ward programs. The third consists of attitudes toward general classes of people, such as attitudes toward mental patients, psychiatrists, and various mental hospital staff.

With this segmenting in mind, readers can evaluate individual studies from the functional perspective that each is constituted by a particular combination of elements, drawn from the respective "by whom" and "about what" categories.

Prior Reviews

It is important to recognize that this literature has been excellently reviewed on several prior occasions, by several authors. One of the most important reviewers has been Rabkin, who established something of a landmark in 1972, by reviewing an overall body of literature under the rubric of "opinions about mental illness". Two years later, Rabkin reviewed just the literature on public attitudes toward mental illness (1974)\textsuperscript{12}, and in 1975, she published an

\textsuperscript{12} In her introduction to this review, published in Schizophrenia Bulletin, Rabkin made the point that research on public attitudes toward mental illness was probably heavily based on conceptions about chronic schizophrenia (1974, p. 9). To the extent that this is true, it underscores the
exhaustive review of the entire literature on attitudes toward mental illness and the role they play in program evaluation.

Between the years 1971 and 1983, Weinstein examined selected components of the overall literature initially reviewed by Rabkin. A good portion of Weinstein’s work stems from his own research in which he gave a questionnaire to 517 state mental hospital patients\textsuperscript{13}. The questionnaire dealt with the patients’ beliefs about the cause(s) of the illness responsible for their hospital stays (1968). The content of the patients’ responses were coded, and nine (interpretable) categories of etiological factors were discerned in the causes that were mentioned. Using these data, Weinstein found, with Brill, that social class indicators did not significantly determine the nature of the patients’ perceptions of the causes of their illness (1971b).

Weinstein and Brill, then, compared the same data set to similar kinds of data collected in five published studies of psychiatrically normal subjects’ beliefs about the causes of mental illness (1971a). They observed both similarities and differences in the conceptions of the two types of subject groups. The similarities the authors related to the strong influence of "cultural beliefs they [the mental patients] acquired during socialization" (p. 102).

Differences were related to the salience of recent experience for research regarding public beliefs and attitudes specifically about serious depression.

\textsuperscript{13} Camarillo State Hospital, Camarillo, California.
ences in the mental patients' careers, experiences which, typically, had lead to hospitalization (p. 107).

Weinstein followed the aforementioned investigations with a conceptual analysis of his data on mental patients' perceptions of the causes of their illness (1972). In the conceptual analysis, he showed that nine factors which were present in patients' etiological beliefs--factors he had described earlier (1968)--could be organized around four causal paradigms. The paradigms he cited were: a "taxonomic method", a "medical model", a "behavioral model", and a "motivational approach" (pp. 41-43).

In 1977, Weinstein turned to general reviews of mental patients' attitudes toward mental illness, the mentally ill, and hospitalization and treatment for mental illness (1977a, 1977b). After that, Weinstein undertook separate analyses of the expressly quantitative research literature on mental patients' attitudes toward hospitalization (1979), hospital staff (1981b), and psychiatric treatment (1981a), in order to determine how favorable or unfavorable those attitudes were. His latest work includes a review of mental patients' attitudes in relation to labeling theory (1983).

This area of literature was reviewed most recently when Farina and Fisher published an in-depth review essay on the implications of "beliefs about mental disorders" (1982). It is instructive to note that, although ten years separated Rabkin's reviews from Farina and Fisher's, Farina and
Fisher's review included only one reference\textsuperscript{14} not cited by Rabkin. That omission undoubtedly stemmed from the fact that the research report in question appeared seven years after Rabkin's initial review was published. In addition, judging from the number of times Rabkin's and Weinstein's reviews were cited in articles dating from the years those respective reviews were published through the first half of 1987, it is evident that both theoretical and empirical activity in connection with beliefs about psychiatric disorder(s) dropped off sharply after the mid-1970's. Some of the implications of this decline will be discussed at the close of this section.

Before moving on, an issue emerging from the aforementioned review articles deserves comment. In his 1979 review of quantitative research on mental patients' attitudes toward mental hospitalization, Weinstein observed that "on both the objective tests and questionnaire scales, patients perceived or evaluated hospitals in general somewhat more favorably than they did their own institution" (p. 253). Weinstein made similar observations of the quantitative research on mental patients' attitudes toward the psychiatric treatment given at mental hospitals (p. 312, 1981a), and toward mental hospital staff (p. 488, 1981b): hypothetical evaluations tended to be more favorable than evaluations based on direct experience.

\textsuperscript{14} A research report by Wehler (1979).
Weinstein's parallel observations are highly significant for the present study. The data on which they are based provide evidence that mental patients are capable of discriminating their feelings about particular instances of personal experience from their beliefs about the universal category from which those instances were drawn. This demonstration of the capacity for discriminative judgment supports a premise underlying the author's endeavor to assess beliefs about depression. Namely, clinically depressed people ("mental patients") can be called upon to reliably report what they believe about depression that applies to everyone, and not merely what they believe to be idiosyncratically true of their own experiences with depression.¹⁵

Several Notable Projects

Because this area of investigation has been so thoroughly reviewed, the next portion of this section will be devoted to just briefly describing a few of the most notable projects of this literature.

Nunnally's Landmark Study

In 1954, perhaps the single most comprehensive effort to measure Americans' beliefs and attitudes about mental health and illness was commenced, under the direction of respected psychometrician Jum C. Nunnally, Jr. One product of that

¹⁵ This discriminative capacity was also demonstrated in results from a study by Whitt, Meile, & Larson (1979, p. 663).
effort was a volume entitled *Popular Conceptions of Mental Health* (1961), published seven years later, under Nunnally’s name. The book presents reports on a collection of studies which were wide-ranging in their content, their design, and their methods. Even basic research projects were included among the studies conducted; most prominent of these being investigations of response set tendencies. Another unusual feature of the studies reported on was the preparation and development of numerous measuring instruments required by the extensive nature of the overall inquiry.

The overarching, applied aim of this impressive piece of coordinated research was to equip social policy planners and mental health professionals with a knowledge base that would enable them to more effectively employ the mass media in the communication of mental health information. In somewhat oversimplified terms, achieving the project’s total aim involved two objectives which were accomplished in two phases of work, employing two basic methodologies. In the first, information assessment phase, survey sample methods were used to determine what the existing conceptions of mental health and illness were. In the second, attitude change research phase, experimental methods were used to determine how those conceptions could be changed for the better (1961, p. 3). The information assessment phase has especial

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16 In the introduction to the studies, Nunnally made the astute observation that "apparent contradictions in research findings are often explainable by the fact that one investigator who purports to study mental-health 'beliefs' is dealing with informational types of responses, and another in-
relevance for the present study, and some of its methods will now be outlined.

In order to find out "what people think and feel about mental health phenomena—[what are their] popular ideas about the causes, symptoms, treatment, and social effects of mental disorder" (p. 3), the project team constructed an instrument that became, probably, the core measure of the numerous measures generated by the project’s collection of studies. They began with an item pool of over 3,000 statements which were reduced to 240 items, and formatted for presentation on a seven-point, Likert-type agreement scale for the purpose of instrument pretesting. The 240-item "preliminary" Information Questionnaire was administered to

vestigator, also purporting to study mental-health 'beliefs,' is dealing with attitudinal types of responses" (1961, p. 4). The distinction between these two classes of response was a crucial one for Nunnally and his coworkers. In his introduction to the information assessment phase of the project, Nunnally amplified the distinction in its operational context: "By information we mean the tendency to agree or disagree with factual, or potentially factual, statements, regardless of whether such information is correct or not" (p. 13). In line with the foregoing comments, it should be pointed out that the author interpreted the project to assess mental health conceptions or mental health information as, essentially, a project to assess mental health beliefs, despite the fact that Nunnally did not use that term in describing the work. This interpretation is consistent with the viewpoint of the present study which regards the information that an individual possesses is what he or she believes to be true. Moreover, as with Nunnally’s statement about information, whether what someone believes to be true is verifiable or not, in the present study those beliefs are taken to be reducible to propositions assuming the form of verifiable statements with which individuals can agree or disagree.

17 It was described as covering "statements related to the causes, symptoms, prognosis, treatment, incidence, and social significance of mental-health problems" (p. 14).
a sample of 349 subjects drawn from Central Illinois. After 60 poorly discriminating items had been discarded, the results were factor analyzed.

Two "final" questionnaire forms were then put into use with items related to ten "information" factors; an initial form containing 50 items, and a "final revised" one containing 60 items. Considerable alteration in item wording and the introduction of new items were part of the process of arriving at the final 60-item questionnaire (1961, p. 259). Two sample items from the final (60-item) Information Questionnaire are provided. The first item, prominently related to the first information factor, "Look And Act Different", reads: "The mentally ill pay little attention to their personal appearance" (p. 261). The eleventh item, prominently related to the seventh information factor, "Immediate External Environment Versus Personality Dynamics", reads: "Mental illness can usually be helped by a vacation or change of scene" (p. 261).

Although a core instrument, the Information Questionnaire was only one of the instruments that the project team developed in order to carry out the phase of information assessment. Instruments were also constructed to assess the mental health conceptions of "experts" (psychologists and psychiatrists) and to assess the conceptions of mental health and illness implicit in the articles, programs, and advertisements disseminated by the media of mass communications.
The project headed up by Nunnally was exceptional in several respects. Despite the ambitiousness of its scope, in both overall aim and diversity of research activity, a coherent focus was retained. In addition, a relatively uncommon degree of painstaking attention was paid, throughout, to methodological issues. Consequently, the project stands as a milestone in social attitude research, and in the assessment of the quality of information possessed by the general public on a culture-sensitive subject; also shedding light on the manner in which public information is culturally managed and can be manipulated. Nonetheless, the project which produced *Popular Conceptions of Mental Health* is very typical of the literature reviewed here from the respect that beliefs about depression were measured only in so far as they were subsumed in a larger endeavor to measure beliefs about mental health and illness in general.

A comment is in order in connection with the partial obsolescence of the valuable data source generated by Nunnally. In the more than 35 years since *Popular Conceptions of Mental Health* was published, America's demographics have shifted significantly. There have been repeated adjustments in American cultural norms as the result of social and historical upheavals, and constantly advancing technology has transformed the nature of mass communications—a principal subject of the "Popular Conceptions" studies—dramatically. This is not to mention that advances in basic research have altered the way in which medical, social, and
behavioral scientists conceive of various psychiatric disorders. Certainly, these fundamental changes have dated the findings of Nunnally's research team. The studies are not uselessly outdated, however. Due to the fact that the "Popular Conceptions" project was well thought out and executed with care, it provides both an invaluable model and a comparative baseline for another data collection from which to gain a new, more accurate understanding of Americans' beliefs about mental health and illness.

Opinions about Mental Illness Questionnaire

Another conspicuous contribution to this literature was made by Cohen and Struening's programmatic research, of the early 1960's. It was designed to investigate differences in the attitudes of all levels of mental hospital personnel (both within and across institutions and occupational groups), for the purpose of assessing the impact of those differences on patient welfare. The central project of their work was the psychometric development of the Opinions about Mental Illness questionnaire (OMI) which they described as "a factor analytically derived set of scales made up of 51 [six-point] Likert-type items which yield factorially stable scores on five dimensions of attitude toward the mentally ill" (1964, pp. 291-292). The names of the five

18 For a study of attitude changes associated with the training of mental health technicians, Paul and McInnis (1974) added a sixth attitude score to the OMI. Not a factor score, the sixth score was the sum of ten items devised by the authors to specifically focus on attitudes compatible
OMI attitude dimensions, along with sample items representing each of the dimensions, are listed below:

**Authoritarianism.** There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents (1964, p. 351).

**Benevolence.** Even though patients in mental hospitals behave in funny ways, it is wrong to laugh about them (p. 352).

**Mental Hygiene Ideology.** More tax money should be spent in the care and treatment of people with severe mental illness (p. 353).

**Social Restrictiveness.** A woman would be foolish to marry a man who has had a severe mental illness, even though he seems fully recovered (p. 354).

**Interpersonal Etiology.** Mental patients come from homes where the parents took little interest in their children (p. 355).

Cohen and Struening carried out their research under the aegis of the Veterans Administration's Psychiatric Evaluation Project and utilized the opportunity to collect large, massed samples. Their total standardization sample, for example, amounted to 8,248 subjects (1963, p. 112). The Cohen and Struening research program entailed a "tooling up phase" devoted to the development of the OMI, followed by an investigational phase in which the OMI was used to study the "attitudinal atmosphere" of 12 regionally and otherwise disparate Veterans Administration mental hospitals (1964, p. 25).

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19 These sample items had the highest factor loadings on their respective scales in the results from the factor analyses performed on the two original samples of hospital personnel.
The process of tooling up the OMI was accomplished in three basic steps.

In the first step of their tooling up process, Cohen and Struening drew substantially on Gilbert and Levinson's work with the Custodial Mental Illness Ideology Scale (CMI; 1956) and developed "a pool of approximately 200 opinion items referring to the cause, description, treatment, and prognosis of severe mental illness" (1962, p. 350). The item pool was reduced, and a questionnaire consisting of 70 Likert-type agreement items was formatted. The questionnaire was administered, in mostly group sessions, to two independent samples of personnel (N = 541; N = 653), drawn from large neuropsychiatric hospitals in the Veterans Administration (VA) system. The samples were "in each case broadly representative of the different levels and functions of personnel whose work brought them into frequent contact with the patients" (p. 350). The results from both samples were factor analyzed separately, using a multiple factor procedure with quartimax rotation, producing a five factor solution. In addition, reliability (internal consistency) and factor validity coefficients were computed and reported to be "quite satisfactory" (p. 355). At the conclusion of step one, the authors had demonstrated, by using the OMI, that mental health beliefs were multidimensional in nature.

In step two, Cohen and Struening carried out a kind of cross-validation study (Struening & Cohen, 1963). They selected 51 of the initial 70 questionnaire items with high
factor loadings "to define the five [OMI] concepts or factors" (p. 290). The revised questionnaire was administered nationwide, in anonymous fashion, to the personnel of 10 new and different VA mental hospitals. From those 10 samples, three very dissimilar hospital settings were identified. Within each of those three identified hospitals, the OMI responses of occupationally representative samples of personnel (N = 400) were selected for comparative analysis. By using these data, the authors were able to demonstrate the factorial invariance of the five OMI attitude factors\(^{20}\), and establish a key for deriving factor scale scores.

In the third and final step of the tooling up phase, Cohen and Struening studied the OMI responses of 16 different occupational groups employed within 12 VA mental hospitals (N = 7,701), along with the responses from 3 samples of convenience. Two of the convenient samples were occupationally defined (Northeastern VA chief psychologists, n = 40; Kansas clergymen of all faiths, n = 111), and one was drawn from members of the general public visiting a mental health booth at a Kansas county fair (n = 396) (1963, p. 112). The responses from all 19 groups were analyzed (a) to delineate the mental health belief profiles, as measured by OMI attitudes, associated with each occupational group, and (b) to determine which occupational groups could be clustered with

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\(^{20}\) In a 1984 study of the Israeli public, Rahav, Struening, and Andrews were able to show that the OMI’s factor structure was also stable across two, quite disparate cultures.
one another to form higher order, attitude profiles for occupational families.

The immediate purpose for which Cohen and Struening developed the OMI was to investigate the relationship between the social atmosphere of a mental hospital—as measured by staff attitudes about mental illness (OMI factor scores)—and the effectiveness of the hospital's therapeutic program. The settings for the investigational phase of Cohen and Struening's research were the 12 mental hospitals in the VA's Psychiatric Evaluation Project (PEP). The subjects in their patient samples were constituted, as well, from the PEP's core sample of "functionally psychotic males" who were inpatients at each of the 12 PEP participating hospitals (1964, p. 293). As a measure of effectiveness, the researchers used the mean cumulative number of "in-community" days spent by a given hospital's discharged patients in the six-month and one-year periods beginning from their dates of admission. The researchers must have felt somewhat vulnerable in connection with their choice of this criterion measure, offering this justification: "We do not assume community stay is the sole basis for evaluating hospitals, but maintain that it is the most important one" (1964, p. 293).

21 These men were under 60, were without serious physical impairment, and had spent no more than three of the six months preceding their index admission/intake into the PEP core sample in a psychiatric facility (Cohen & Struening, 1964, p. 293).
As the first part of achieving their investigational objective, Cohen and Struening performed a cluster analysis on the hospital atmosphere profiles. These cluster profiles were then related to a two tiered (6-month and 12-month), prognosis-adjusted, effectiveness criterion of in-community days. Although the overall results were consistent with "what everyone knew, namely that authoritarian-restrictive hospital atmospheres are bad for patients" (p. 296), an unexpected degree of complexity in the clustering of the hospital atmosphere profiles militated against confidently stated interpretations of the authors' less than conclusive findings. However, in a follow-up study (1965) of attitudes among the eight occupational groups in the 12 hospitals they studied, Cohen and Struening made the interesting finding that the greatest variability, across settings, was due to psychiatrists' endorsements of Social Restrictiveness items. Cohen and Struening saw in this result confirmation for the notion that psychiatrists' differing ideological commitments were responsible for between hospital differences in patient time spent in the community (p. 26).

Cohen and Struening's work was exemplary by virtue of several key characteristics. First, they had a steadfast commitment to an empirical determination of questions about which clinicians (including themselves) had prized ideological investments. Second, they used sophisticated but straightforward quantitative and statistical methods. Third, and of greatest relevance to the present study, was
the clarity with which "the idea that the attitudes of members of the larger society generally, and those of hospital personnel specifically, bear on the course and outcome of a mental illness" (1964, p. 291) played a consistent and defining role in Cohen and Struening's programmatic research.

Behavioral Revision of OMI Research

Given the strengths of Cohen and Struening's research approach, it is easy to understand how the OMI came to be cited, in 1976, as "by far the most frequently used scale to assess staff attitudes" (Edelson & Paul, p. 248). It is also hard not to speculate that more than coincidence was involved in Rabkin's use of "Opinions About Mental Illness" as the title for her landmark 1972 review article. Despite its obvious strengths, OMI research also had a crucial weakness: the lack of a solid behavioral foundation. This weakness was addressed, however, by Ellsworth, not longer after Cohen and Struening's work was first published, through the inclusion of the OMI in a study (1965) designed to correct for the chief inadequacy of previous OMI research.

Ellsworth had mental hospital personnel (65 aides and nurses) complete factor analyzed attitude questionnaires, but with the major difference that he correlated their endorsed attitudes (factor scores) with their behavior. Staff ward behavior was rated with a "55-item interpersonal rating
scale", by 188 of the patients who were in their charge (p. 194). Ellsworth’s study both valuably extended Cohen and Struening’s work and provided the basis for sounding a fundamental caution about it: "This study also suggests that attitude dimensions which are uncovered through factor analysis may represent mathematically cohesive ways of viewing mental illness, but that these factor dimensions do not necessarily make a difference in one’s behavior" (p. 199).

The same type of involved but critical approach to OMI research reappeared in 1976 when Edelson and Paul critically reviewed the literature on research employing measures of (mental hospital) staff attitudes and ward atmosphere as indicators of treatment effectiveness. They argued that attitudinal indicators were too tenuously related to the kinds of staff behaviors hypothesized as active in effecting patients’ improvement. Direct assessments of actual staff behavior presented a better alternative (p. 248).

In an empirical study (1977), Edelson and Paul found that patient chronicity and ward size were highly correlated with the attitudinal atmosphere which had been associated with the highest level of (institutional) treatment effectiveness in Cohen and Struening’s OMI studies. In light of this finding, Edelson and Paul interpreted that the reported relationships between OMI attitude profiles and measurements of treatment effectiveness had been confounded by the measurement of suppressed, treatment relevant variables such as patient chronicity and ward size. Furthermore, Edelson
and Paul held that this interpretation applied to all studies employing similar, indirect measures of staff behavior.

Beliefs, Interpersonal Influence, and Therapeutic Outcome

Before moving on to a concluding discussion of some issues germane to the literature covered in this section, it is well to make mention of some highlights from a frequently cited study by Manis, Houts, and Blake. In the opening of their 1963 article, the authors established that they conceived of their research efforts as continuous with those of Nunnally, and of Cohen and Struening, with the exception that they were concerned primarily with the beliefs of hospitalized psychiatric patients, a group not studied by either of the former research teams (p. 226).

Using a questionnaire based almost entirely on Nunnally's work with 10 belief clusters (Nunnally, 1957; cf 1961) which was administered to four relatively small samples, the researchers employed an ingenious design to test a fairly comprehensive set of hypotheses about relationships between psychiatric status and beliefs about mental illness. This yielded one of the only results to be found in all of this literature which was tied specifically to depression: a mixed sample of psychiatric patients with elevated Depression scale scores on the MMPI tended to strongly endorse items reflecting the belief that mental illness is serious (pp. 228-229).
From the point of view of the present study, the noteworthy aspect of Manis, Houts, and Blake's contribution was their focus on "the importance of [interpersonal] influence processes in the therapeutic relationship" (p. 233). This focus was represented in the study's key hypothesis, linking the influence of psychiatric staff, measured as the extent to which patients' beliefs changed in the direction of staff beliefs, with favorable response to treatment. After rigorous consideration of a number of alternate plausible explanations for their data, Manis, Houts, and Blake were able to demonstrate that patients whose beliefs became most like the beliefs of the staff members taking care of them, were the patients who obtained the earliest discharges from the hospital (criterion of positive treatment response) (pp. 229-232).

A General Psychosocial Thesis

A bold thread runs through the literature discussed in this section. From the perspective of the present study, it is the literature's outstanding feature, and delineates a general thesis, strongly psychosocial in nature, which can be expressed in three related propositions.

The first proposition is that the treatment of psychiatric disorder ("mental illness") is conditioned by the full and ultimate social context in which it occurs. The second is that beliefs about psychiatric disorder form a critical element of that social context; an element potent
enough to be a determinant of treatment outcome, in and of itself. The third is that beliefs about psychiatric disorder are distributed throughout the culture, and are present as an active variable in all sectors of the social context of treatment, i.e., in the faceless public surround (including the media), in patients, their families, and their various networks (e.g., significant relations, workplace, community, etc.), and in all levels and categories of treatment providers and care givers.

In the body of literature reviewed here, depression is addressed neither in a specific manner nor as an isolated subject. However, by advancing a cogent and empirically validated general thesis, this literature persuasively supports an argument in favor of describing and investigating specifically depression-related beliefs along the lines of the general psychosocial thesis.

A Secondary Literature

For the most part, the research literature previously discussed in this section has dealt with one aspect or another of a general psychosocial thesis by investigating variables which were either plainly manifest or highly circumscribed due to stringent operationalization. A number of both subtler and more diffuse aspects of that thesis regarding the social context of treatment have been raised, however, in literature which will be worth touching upon; a
more complete treatment of it is beyond the scope of this review.

**Stigma**

For the most part, the work represented in this secondary, or less narrowly focused, literature concerns itself with broadly conceived issues which have very wide social implications. A good instance of this is the writing and research on the "stigma" associated with mental illness. In this work, championed by Scheff (1966), dominant cultural beliefs about mental illness and attitudes toward the mentally ill play a major role in shaping a damaging perception that psychiatric disorder and disability are deviant. In a well-known sequence identified by social labeling theorists, the stigmatizing societal reaction that follows in the wake of perceived deviance has many ripples. Most pernicious of these is, perhaps, the negative self-labeling it can prompt in those who seek, or are engaged in—or may have, even, already benefitted from—psychiatric treatment and/or psychological care.  

**Gender-related Mental Health Beliefs**

Another good example of this secondary literature is the research which has shown that mental health beliefs are

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22 Although, for a review of findings from 35 studies of mental patients' attitudes which did not support five basic propositions derived from the social labeling approach to mental illness, see Weinstein (1983).
colored by and are subordinate to a more fundamental set of culturally determined beliefs about what is appropriate gender-specific behavior. In a frequently cited study, using a 122-item sex-role Stereotype Questionnaire, investigators found that a group of mental health clinicians made judgments about the mental health of hypothetical individuals which reflected previously documented, sex-role stereotypic social norms (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). Stereotypically masculine traits were viewed by the clinicians as more healthy and mature than feminine ones, and behavioral attributes assigned to describe a healthy adult, of unspecified sex, were those previously described as characteristics more appropriate to men than women.

Of greater pertinence to the present study is follow-up research conducted by Hammen and Peters that revealed clear, gender-related differences in college students' responses to depressed persons, both hypothetical (1977) and real (1978). Overall, the students found depression to be incongruous with appropriate male sex-role functioning but not particularly incongruous with appropriate female sex-role behavior. One reason Hammen and Peters' findings are of special interest is that they offer a plausible starting point for explaining the much higher reported incidence of depression among women than men. Just these fragments, taken from the sizable literature on sex-role stereotypes, offer evidence of the fact that deeply embedded social psychological struc-
tures, like concepts of gender identity, play an important role in (a) regulating the elicitation of behavior construed in terms of depressive nosology, and in (b) ultimately mediating individuals’ experience of depression.

Race, Ethnicity, and Complexity

Although race/ethnicity and mental health literature will not be cited here, a comment is in order to help suggest how variables such as gender and race and ethnicity operate as dimensions of the same space in which beliefs are formed. Like gender, race and ethnicity are genetically-determined variables with intensely psychosocial value which color mental health beliefs and tend to be superordinate to them. Because of extreme heterogeneity in the ethnic composition of American society, ethnicity makes a complex contribution to the formation of mental health beliefs. While this is less so for race, the nature of the contribution is the same. The contribution is, actually, an interaction between universally acquired, dominant cultural beliefs and the beliefs of a particular subculture (often "hyphenated", e.g., African-American, Irish-American, etc.) and relevant local cultures (e.g., work, school, neighborhood, and church

23 It is surprising to note that the variable of social class does not also operate in this same space. According to both literature reviews and empirical studies conducted by Weinstein and Brill (hospitalized patients’ perceptions of mental illness etiology; 1971b) and by Frank, Eisenthal, and Lazare (walk-in clinic patients’ treatment conceptions; 1978), social class does not exert a meaningful effect upon the formation of beliefs about mental illness and its treatment.
circles), transmitted in the home and extended family network.

The task of accounting for the discrete contributions made to belief formation by gender and race and ethnicity, conjointly, becomes exponentially more complex than was true of accounting for the influence of any one of those psychosocially salient variables taken by itself. These variables have a mutually defining, interdependent effect on one another, with ethnicity and race being especially strong determinants of social cognition about sex-role and sex-role behavior. One would expect, therefore, that a Southern (U.S.) Black American male's conceptualizations about depression, for instance, would differ from the conceptualizations of both a Northern Black American female who was of immediately Carribean extraction, and of a White American male of distant but mainly Western European extraction, etc.24

Zeitgeist Effects

A third case to consider in the secondary literature of mental health beliefs is mentioned in order to convey some sense of the possible breadth which a macrosocial perspective on treatment issues affords. Nearly every era is characterized by a synergy of distinctive intellectual de-

24 Townsend's research (1979) comparing ethnic stereotypes to stereotypes about the mentally ill offers an interesting twist on the issues of ethnicity, stereotyping and mental health, discussed above.
velopments, artistic trends, technical innovations, historical events, and political movements which imbue that time period with an unmistakable spirit. Given that almost all endeavors are molded in some manner by the varied influences of the epochal climate in which they are undertaken, it should be of little surprise to observe that mental health endeavors are also subject to "zeitgeist"-type social effects.

Judging from the literature, mental health professionals--situated in all sectors of the treatment context--appear to be the most sensitive to the influence of zeitgeist, both during the period of their training and in the ensuing years of practice. Sometimes zeitgeist effects are expressed in a limited, local fashion, as when the entire staff of an agency or institution adopts a collective clinical mission, aligned with one of the reigning ideological positions of the time.

Working in an innovative manner, Morrison addressed an applied clinical side of the issue of agency-based beliefs (1976). He observed that chronic mental patients, when inpatients at state mental hospitals, tended to become deeply inculcated in the medical model approach to mental illness. Then, when discharged for care as outpatients at community mental health centers, these same patients would find their treatment beliefs to be at considerable odds with the psychosocially-oriented beliefs of the mental health professionals at the centers where they were receiving
treatment. Using specially devised didactic seminars, Mor­rison succeeded in "demythologizing" community mental health center clients to the degree that it enabled the former hos­pital patients to embrace beliefs about mental illness which were more like those of their outpatient treatment providers. Morrison was able to note that one consequence of this engineered shift in beliefs was that there were rel­atively fewer subsequent psychiatric hospitalizations among community mental health center clients who had been de­mythologized than there were among a control group of center clients who had not received the training (p. 185).

There are also instances, however, in which treatment agencies inadvertently seem either to adopt the same general approach to treatment or to implement the same treatment for a particular disorder; even, when the soundness of both may not be rooted in empiricism. For instance, in a large scale (NIMH) treatment of depression study, Keller et al. (1986) conjectured that it was the shared treatment beliefs of clinicians at five collaborating university centers which were responsible for (a) treatment plans that were at vari­ance with "the ideal, as described in the research liter­ature and in modern clinical teaching" (p. 464), and (b) observed differences in treatment outcome across the cen­ters. In an article commenting, in large part, on the im­plication of these results reported by Keller et al., Kupfer and Freedman (1986) offered corrective recommendations for future research which included the following: "We must know
something about the treating agencies as well as about the patients—what are the prevailing agency-wide attitudes about various forms of treatment?" (p. 511)²⁵.

It is more usual, however, for zeitgeist effects to be conceived of in their wider dimensions. For example, mental health professionals perennially strive to assess the state of their respective fields—a task which typically falls to organizational presidents, keynote speakers, and participants in interdisciplinary dialogues. On just such self-conscious occasions, attempts are often made to articulate the ideological parameters of the current zeitgeist (see for example, Grinker, 1969, and Albee, 1969). Researchers have also attempted to gauge the effect that more instrumental aspects of zeitgeist have on treatment by directly surveying physicians’ treatment beliefs, treatment preferences, and ideological orientations (e.g., Armor & Klerman, 1968; Baker & Schulberg, 1967; Casariego & Greden, 1978; Coryell, 1982; Wilkinson & Williams, 1986).

In more dramatic fashion, every era seems to witness the appearance of a book or an article which epitomizes the zeitgeist, and in doing so, reifies it. Such publications

²⁵ It is ironic that, eleven years before, Rabkin raised this very issue: "We also need to know how major differences in attitudes toward the causes and treatment of mental disorders among treatment team members, administrators and clinicians influence the effectiveness of mental health programs. In general, studies of interactions between patient, staff, and program attitudes and assumptions represent a more complex level of understanding, and depend on the prior delineation of direct relationships between attitudes and behaviors" (1975, p. 477).
have a particularly galvanizing effect on burgeoning beliefs about etiology and treatment which conform to the current zeitgeist. Moreover, they tend to amplify the impact of zeitgeist by arousing sentiments and serving as a rallying point for organized professional activity, one of the formal cultural expressions of zeitgeist. Two good examples of this phenomenon are Szasz' strikingly iconoclastic, libertarian manifesto of the Sixties, The Myth of Mental Illness (1961), and Andreasen's contemporary paean to the "Biological Revolution in Psychiatry"26, The Broken Brain (1984). Although refractory to traditional methods of measurement, zeitgeist effects are as certain an aspect of the behavioral ecology of treatment as any detailed in this section, and it would be an error to either overlook or underestimate their influence on treatment.

Waning Interest in Beliefs about Psychiatric Disorder

Earlier in this section, it was pointed out that there has been a very noticeable decline in the number of studies

26 Andreasen's subtitle alludes to a widely disseminated, somewhat dialectical view of psychiatry's history. According to this view, psychiatry evolves in response to successive "revolutions", or events of transforming magnitude. It's a progression that commenced with Pinel's liberation of patients from their chains (the first revolution), and was continued through the introduction of phenothiazines and other major tranquilizers (the second), and the advent of the community mental health movement (the third). Conscious of the power to be gained from naming the zeitgeist, Andreasen presented her book as the treatise of a new (fourth), self-proclaimed revolution in psychiatry and an emblem for the revolution's standard bearers.
which have been conducted on mental health beliefs since the 1960's and early 70's. In concluding this section of the literature review, it will be useful to reflect upon the possible reasons for this waning of research interest in beliefs about psychiatric disorder and what that might mean. It seems that, at least, two different factors were responsible for the decline. One factor affected research involving the general public, mental health practitioners, and mental hospital staff; the other factor, studies involving psychiatric patients.

Deinstitutionalization

One possible explanation for the marked drop-off in investigations into the mental health beliefs and attitudes held by the public and by treatment providers is that the historical conditions which had originally given impetus to that research changed drastically, and the zeitgeist which had fed the research exhausted itself. Judging from the years in which the preponderance of studies were carried out, one gains the impression that this research is fixed in time, the product of a moment situated between two of modern psychiatry's great revolutions in the treatment of the seriously mentally ill.

It is quite clear that, initially, the research was spurred by the second revolution[^27] in psychiatry, when phe-
nothiazines were widely introduced, in the late 1950's. These new drug treatments soon became the effective bulwark of antipsychotic therapy, altering what had been the nearly hopeless plight of the severely mentally ill, the majority of whom were forcibly confined to state-run institutional colonies. The sudden availability of powerful new tranquilizing medicines made the psychiatric hospital the locus of therapeutic endeavor, and no longer just a benign citadel of the mental hygiene movement (the outgrowth of the previous psychiatric revolution). The transition from custodialism to active treatment, coupled with the relatively controlled hospital milieu, made the psychiatric hospital an attractive and deserving subject for clinical investigators' interests. Similarly, questions of whether, to what extent, and how the changed rehabilitative prospects of the mentally ill were filtering into public attitudes toward mental illness, became natural and timely subjects for researchers' attentions.

With startling rapidity, the extraordinary success of the pharmacologically-inspired revolution made itself felt in the emptying of the nation's psychiatric hospitals. "Deinstitutionalization", or the largely uncoordinated, mass migration of former mental patients to mostly unprepared communities, was a clinical, social, and economic problem of unforeseen scope. This unprecedented development created sufficient political pressure to bring into being a rationalized, comprehensive program of federally funded community
mental health care, and with it, the launching of the next psychiatric revolution. Although antipsychotic drug evaluation research continued unabated on hospital grounds, with the coming of the community mental health movement and growing understanding of phenomena like revolving door admissions, psychosocially-oriented research shifted away from investigating the behavioral ecology of hospital-based treatment and toward more intrinsic psychological problems like social skills training.

Professional Bias?

"The neglect of or lack of interest in patients as informants" (1981b, p. 483) is how Weinstein couched the second factor associated with the decline of research in this area of literature. On four separate occasions, Weinstein has taken social scientists to task for what has been their historical failure to inquire directly into patients' beliefs (1972, pp. 38-39, 1979, p. 240, 1981a, p. 303, 1981b, p. 483); arguing that "data...from the patient's perspective have theoretical relevance for sociologists and psychologists in their studies of self-concept, formal organizations, sick-role behavior, socialization, and interpersonal relations" (1979, p. 255). Of especial importance to the present study, in this regard, is the emphasis he placed on the curious lack of research interest in patients conceptualizations about their illnesses, in general, and their
beliefs about the etiology of their illnesses, in particular.\textsuperscript{28}

In a 1972 paper, Weinstein first offered the explanation that this research blackout was "the result both of a theoretical bias and of an empirical shortcoming" (p. 38). He traced the theoretical bias to the tendency of people—noably, those in the medical and scientific communities—to discredit the views of patients as unreliable or irrelevant because those views are considered to be the contaminated product of patients' psychopathology. In a subsequent elaboration of this hypothesis, substantiated with citations from others work, Weinstein pointed out that the bias was identified with the medical model of mental illness (1979, p. 240). Moreover, after indicating that it was common for clinicians not to accept patients' statements at face value because of a psychodynamic proclivity to interpret such statements primarily as expressions of unconscious fantasies, Weinstein concluded that "opinions expressed by patients who have cognitive impairment are thus doubly suspect".

Is there a parallel between the professional bias which Weinstein identifies here and the factor—cited in the opening section of this literature review—which is responsible for undesirably restricting the cognitive paradigm? If dis-

\textsuperscript{28} On the clinical front, Morrison, writing in 1976, stated: "It has not yet become common practice for mental health professionals to focus on the attitudes of psychiatric patients about mental illness" (p. 181).
ordered cognition has come to be regarded as the hallmark of depression, has that cognitive emphasis lead to a hardening of an existing, general bias which tends to invalidate psychiatric patients' own statements of their beliefs? Does that help to explain why depressives' beliefs about depression as an illness have so thoroughly escaped investigation?

Is Weinstein's hypothesis to explain the neglect of patients' illness conceptualizations echoed, in some way, in the factor which was responsible for the narrow selectivity in the transfer of research methods, discussed at the conclusion of the previous section on health and illness behavior? Are researchers and clinicians so engrossed in the psychopathological aspect of the depressed patients they study and treat that they are unable to notice the many important ways in which those depressed patients are like others (i.e., medically ill patients) in the sick role?

One is left to wonder at what appears to be a consistently emerging blind spot in the manner in which the role of beliefs are conceptualized in psychiatric research, most especially as it relates to depression.
SECTION D.
THE CONSEQUENCES OF MENTAL HEALTH BELIEFS AND ATTRIBUTIONS

Although the body of literature examined in this section is comparatively small, it is arguably of greatest importance to the present study because of its immediate implications for clinical practice. It was shown that the literature reviewed in the preceding section set forth a general thesis in which beliefs were defined as an aspect of the psychosocial context that influences treatment. That general thesis assumes a more operational and clinically meaningful character in this section because the theoretical and empirical contributions to the literature reviewed here directly examine some of the consequences that can accrue from treatment relevant beliefs. This literature shares a previously encountered limitation, however, in that the majority of it is, regrettably, not specific to depression.

Beliefs about Illness Controllability

This section begins with the review of a loose collection of studies sharing a common theme. This theme deals with the way in which individuals' illness beliefs about mental disorders shape their perceptions of the controllability of these disorders. In this theme, it is that ability to shape perceptions of illness controllability that is represented as the key consequence of illness beliefs.
Disease Process vs. Social-Learning Beliefs about Mental Health: Four Social Psychological Studies

We will begin with a look at a highly relevant set of studies conducted by Farina and his colleagues (Farina, Fisher, Getter, & Fischer, 1978; Fisher & Farina, 1982). Their work explicitly concentrated on the consequences of beliefs about mental disorder, and was conceptualized in terms of constructs integral to the present study.

Employing highly inventive methods, the kind which exemplified the experimental/laboratory thrust in American social psychology research of the 1970’s, Farina and coworkers carried out a sequence of four studies which will be treated here as an integrated program of investigation. The subjects in all four studies were college undergraduates.

The first three studies were designed to explore the hypotheses expressed in the following passage:

...although disease notions are alleged by many mental health groups to be the most appropriate explanation for mental disorders, accepting such beliefs may be associated with some negative effects; specifically...if people view their own difficulties in this way, they may feel relatively helpless and torpidly accept their fate. In contrast, conceptions of mental disorders that promote an active effort to think problems through and to reduce them by changing behavior seem more likely to improve adjustment. (Farina, Fisher, Getter, & Fischer, 1978, p. 274)
Two studies

Subjects in the first two studies were presented with the ostensible task of helping to evaluate the services at their university's mental health clinic. To do this, they were given either of two explanatory leaflets which exposed them to a communication "allegedly summarizing the contemporary views of mental health experts on the nature of mental illness" (Farina et al., 1978, p. 274). One of the communications promulgated a disease process model of mental illness, and the other a social learning conception of mental illness. On the leaflet, there was space for subjects to respond to five Likert-type items that were intended to assess the impact of the mental health message to which they had been exposed.

The results in both studies supported a general hypothesis that "people exposed to different mental health messages express different beliefs about the nature of mental illness and differ in what they say about a sufferer's ability to help himself" (p. 276). One of the specific findings was that students exposed to a disease message believed there was little that mentally troubled persons could do to help themselves, while students exposed to a social learning message believed in the effectiveness of self-help. This suggested to the investigators that "a disease conception produces a feeling of helplessness that may lead to depen-

29 The second study was a replication of the first; in the first study, N = 119, and in the second, N = 286.
dence and inaction in a person suffering adjustment problems" (p. 275).

A third study

The third study was far more elaborately devised. In essence, a small sample of female students (N = 38) were inducted into an intricate and extended experimental ruse in which they were given professionally printed pamphlets which, they were told, had been produced by "the group recognized as most competent to speak on mental conditions" (Farina et al., 1978, p. 276). The mental health message contained within the bogus pamphlet received by half of the subjects espoused a disease process conception of mental illness. The other half received an otherwise identical pamphlet that espoused a social learning conception. After reading the pamphlet, each student had a 20-minute psychotherapy session with a (genuine) therapist-in-training at the university's mental health clinic who was blind to which of the two mental health messages the subjects had been exposed. Subjects were urged to seek "help for things that really bothered them", and therapists were trained to conduct "standard initial interview[s]".

Following the therapy session, subjects were asked to complete a five item questionnaire which—as was the case in the first two studies—was intended to assess the differential impact of the two mental health messages. Lastly, for the ensuing seven days, subjects were required to keep a
journal in which they were to note the occurrence of any problem that had been discussed during their therapy module. For each journal entry, subjects were "asked to indicate what role, if any, was played by the psychotherapy they had received and also to assess the degree to which they felt in control of the situation" (p. 277).

Farina, Fisher, Getter, and Fischer regarded the journal writing as the major dependent variable of the third study. They hypothesized: "...if someone believes problems stem from his shortcomings and errors in interpersonal behavior, he is likely to contemplate them....On the other hand, if he believes his difficulties are due to a disease, he will blame them on disease-induced anxiety, depression, or thinking difficulties. Presumably he will see those as somatic symptoms that might have a biochemical basis and are in no way subject to his control. Thinking about interpersonal relationships cannot improve them and will only cause pain" (p. 276). The purpose of the journal writing, therefore, was to capture differences in both the extent and manner in which subjects contemplated their problems. Multiple analyses of the journals revealed only one statistically significant difference in the two groups' journals, and it supported the researchers' hypothesis. It was learned that subjects who had received the social learning message appeared to have thought more about their personal problems during the course of a week than did those who had received the disease message.
A fourth study

The fourth study, conducted by Fisher and Farina (1979), was ingeniously designed to extend and cross-validate the first three studies by broadly controlling for the effects of method variance which could possibly have accounted for some of the results reported by Farina et al. (1978). In contrast to the earlier studies, the fourth study was carried out in a thoroughly unobtrusive manner, in a natural field setting, over a prolonged period of time (four months).

The subjects in the fourth study were the members of two abnormal psychology classes (N = 81) who were completely unaware of their role as participants in a research study. In this case, the mental health messages to which subjects were exposed were manipulated, throughout the duration of a semester-long course, as a function of the "'real world'" differences in the actual points of view of their two course instructors.

For the initial studies, Farina et al. had introduced the construct of a mental health continuum. Along this continuum, mental health beliefs, views, and communications ("propaganda") were said to range in orientation from a disease process conception of mental illness at one end, to a social-learning conception at the other. For the fourth study, Fisher and Farina retained the same construct but redefined the disease process end of the continuum slightly, referring to it as a biosocial orientation—once or twice,
identifying it as "the medical model" (p. 325). Pre-study assessments were used to a) confirm that the pre-existing belief orientations of the two course instructors were congruent with their respective experimental roles as transmitters of biosocial and social-learning mental health messages, and b) establish that there was roughly equivalent variability in the preexisting mental health belief orientations of the two classes of students.

The dependent measure in the fourth study was a questionnaire consisting of 10, five-point, Likert-type items which was administered at the conclusion of the semester-long course. Subjects were asked to respond to the questionnaire on the pretense that they were providing information that would prove useful to the university's mental health clinic. Successfully replicating the central finding from the earlier studies, Fisher and Farina found that differential exposure to communications about the nature of mental disorders resulted in subjects assuming the belief orientation espoused in the communication to which they were exposed.

Of greater interest, perhaps, was the fact that in 4 out of 8 instances, Fisher and Farina found significant differences in subjects' beliefs about mental disorder and the degree to which individuals were capable of exerting a useful measure of control over it. These differences were in the direction the investigators had hypothesized, i.e., the differences were attributable to conceptual distinctions
in the messages to which subjects had been differentially exposed. Further, there was one instance in which Fisher and Farina found a behavioral difference between the groups: biosocial subjects reported the recent use of alcohol and drugs to relieve emotional problems to a significantly greater extent than did social-learning subjects (p. 323).

Fisher and Farina put great stock in the generalizability of their cumulative research findings, a confidence which they believed was justified by the results of the fourth study. They reasoned that the results indicated that "the pattern of effects observed in the earlier experiments may occur in an unobtrusive 'real world' setting as well as in the laboratory, when instilled by means of an extended series of communications as well as by a single communication, and when the effects are measured long after the initial communication as well as shortly after it" (p. 323). Moreover, the clinical import of their replication of the results from the first three studies lay in the fact that there was now "strong evidence that a social-learning orientation to mental disorders is more likely to lead to attitudes conducive to active attempts to improve one's situation than is an orientation incorporating medically related factors" (p. 323).

Overall, the results from the four studies indicated to Fisher and Farina that an important consequence of individuals' beliefs about mental disorders is that it determines their "perceived locus of control for problems related to
mental health" (p. 325). Furthermore, the findings sug­
gested that when individuals adopt social-learning beliefs,
they may be left "with a feeling of having a great deal of
internal, personal control", whereas when they adopt bioso­
cial, disease-oriented, or "medical model" beliefs, individ­
uals may be left "externally oriented and [feeling] person­
ally helpless".

Related Findings: Beliefs and Control

The findings from the social psychological research of
Farina and his collaborators offer a good vantage point from
which to consider results from several other studies.

Attitudes to mental illness:
Their relationship to therapeutic dependence

Morrison, Bushell, Hanson, Fentiman, and Holdridge-
Crane (1977) investigated the relationship between mental
patients' attitudes towards mental illness and their atti­
tudes towards (therapeutic) dependence. The researchers
sought to test a notion offered by "opponents of the medical
model...that acceptance of a medical paradigm by psychiatric
patients often ensures passive-dependent attitudes" (p.
1194).

Morrison et al. used two measures, both of which were
developed principally by Morrison: a 20-item Client
Attitude Questionnaire, measuring attitudes toward mental
illness that reflected either a medical model orientation or
a psychosocial one, and a 16-item Client Independence
Questionnaire, measuring a client's relative dependence on psychiatric staff. They found a significant correlation of .60 (p<.01) between the mental health attitudes of 58 psychiatric outpatients and their attitudes of dependence. Subjects endorsing a medical model orientation tended to express attitudes indicating dependence on staff, and subjects endorsing a psychosocial orientation tended to express attitudes of independence from staff.

The point of interest, here, is that this pattern of results fits neatly with the main theoretical formulation of the Farina group that biosocial or disease-oriented beliefs eventuate in a passive, dependent, other-oriented attitude towards problems, while psychosocial beliefs promote an attitude of active, independent self-care.

It should be noted that Wehler (1979) failed to replicate Morrison et al.'s findings with a sample of 60 psychiatric inpatients.

Treatments which deprive the need for control: An anecdotal report

While results from the preceding study by Morrison et al. (1977) do corroborate the major findings of the Farina group regarding some of the consequences of ideological belief orientation, the inferences one can draw from it are quite limited. It is a correlational study of self-reported

\[\text{30 The sample was almost 2/3 female (65.5\%), relatively young (mean age = 35.2 years), and had an average of 12.6 years of education.}\]
attitudes, albeit the attitudes of a pertinent subject sample. On the other hand, the article we turn to now, by Bursten (1985), though suffering from the weaknesses of anecdotal reports, provides stronger corroboration of Farina and his collaborators' findings by virtue of its clinically contextualized description of actual patient behavior. Additionally, Bursten's short, well-focused article illustrates the way in which illness belief ideology relates to the construct of control, and has its clinical consequences specifically in the treatment of depression.

In psychotherapy sessions with some of his patients who were also receiving antidepressant medications, Bursten encountered "a certain type of struggle with the concept of biological depression" (p. 245). Drawing upon case material, he showed that, for some of these patients, the biomedical conceptualization of their illness—a conceptualization which rationalized their treatment—deprived them of their sense of control over their illness and displaced their need to be a responsible agent in the resolution of their depressions. These losses were experienced as intolerable. The patients' investments in "the individual meanings [they] attributed to their condition" were too great to be sacrificed. As a consequence, they were unable to comply with the drug regimens which constituted their treatments for depression.
A treatment for depression study

Moving first from correlational data to anecdotal data, we now proceed to examine some outcome results from a controlled study of treatment for depression by Simons, Lustman, Wetzel, and Murphy (1985). Because of its more conventional methodological rigor, its measurement of symptom behavior, and its specificity to depression, this study has somewhat more potential than the two studies just reviewed to enlarge our understanding of the clinical consequences of illness beliefs in the treatment of depression.

In their study, Simons et al. attempted to delineate the relationship between a behavioral attribute, "learned resourcefulness", and treatment outcome in the cognitive therapy vs. tricyclic antidepressant therapy of 35 "moderately depressed" outpatients. They assessed learned resourcefulness with Rosenbaum's Self Control Schedule (1980), regarding it as a measure of "skills [that] might play a role in enabling a person to arrest a depressive episode" (Simons et al., 1985, p. 81).

Using median splits to divide their subject samples into high and low Self Control Schedule scorers, Simons et al. found that patients who entered treatment with high levels of learned resourcefulness did better with cognitive therapy than did patients who were low in learned resourcefulness, and that patients who entered treatment low in

31 Beck Depression Inventory scores of 20 or higher; for complete description of study samples and methods, see Murphy, Simons, Wetzel, and Lustman (1984).
learned resourcefulness did better with pharmacotherapy than did the high resourceful patients (p. 85).

These results unequivocally confirmed a significant interaction between treatment condition (modality) and measured levels of learned resourcefulness. However, lacking assessment of correlative variables, the researchers were unable to judiciously interpret the definitive nature of the contribution made by a variable like learned resourcefulness—itself complex and most likely epiphenomenal—to a process as complex and as imperfectly understood as treatment response. They did, nevertheless, venture to speculate that patients' differing beliefs about the controllability of depression may have given underlying structure to the differential pattern of treatment response which was observed to be tied to learned resourcefulness (pp. 86-87).

Implicit in their speculation, Simons et al. were suggesting that a serious consequence of beliefs about depression is that it may condition one's ability to benefit equally from different treatments for depression.

**Depression about depression: A consequence of believing depression is uncontrollable**

The study by Simons et al. (1985) produced some intriguing empirical data relative to the consequences of beliefs about depression for the differential treatment of that disorder. As was pointed out, however, Simons et al. needed to observe other variables in order to have made more satisfying interpretations of their data. Also, their eval-
uation of outcome in the treatment of depression was un-guided by any theoretical formulation, another factor which hampered their attempts to shed light on the meaning of their findings. In contrast, the author of the next article we will review adopts a completely different tack in order to investigate a matter about which Simons et al. could only speculate, i.e., the possible impact of beliefs about the controllability of depression.

In a theoretically intensive paper, Teasdale (1985) posed a deceptively elemental question about how psychological treatments for depression work. For this inquiry, Teasdale adopted a somewhat novel point of departure:

The onset of clinical depression may occur for a variety of reasons, not all of which we fully understand. However, as far as treatment is concerned, our best strategy is likely to be to concentrate on the factors that maintain depression after onset [emphasis added]; treatment usually starts with someone who has already been depressed for some time so that changing the factors maintaining the depression is likely to be the first aim of treatment. It is assumed that depression in mild and transient forms is common, and that its normal course is one of remission and recovery. It follows that in looking at the maintenance of clinically significant depression we concentrate on the factors that impede the recovery that might otherwise occur.  

The concluding clause here, "factors that impede the recovery that might otherwise occur", is a significant one and bears some scrutiny. It presents, for the first time, the phrase, "the recovery that might otherwise occur", one of Teasdale's crucial operative notions. Appearing in every key statement in the article, it posits the primacy of a natural therapeutic tendency. Taken together with the notion that treatments should be targeted to factors which "impede" the natural process of recovery, it implies a Rogerian-like treatment philosophy that is facilitative and aimed at removing blocks (impediments) to that process. It conveys a kind of faith in the organism's movement toward
Teasdale postulated a "working hypothesis" to account for the maintenance of depression that was predicated on a reciprocal relationship between depression and negative cognitive processing. He described the reciprocity as a "vicious circle", whereby "experiences perceived as highly aversive and uncontrollable will intensify depression and, once depressed, experiences will be more likely to be interpreted as highly aversive and uncontrollable, so producing further depression" (p. 159)\(^3\).

Continuing, Teasdale offered the ultimate rationale for his hypothesis, and introduced with it, his prime construct. He asserted that it was a "lack of knowledge about depression as a psychological state" (p. 160), when combined with the negative skew in depressive thinking, that caused individuals to become depressed about being depressed. He, then, cautiously estimated the importance of depression about depression, as follows: "in some cases, this may be the major factor preventing the recovery of the depression that might otherwise occur" (p. 160).

The careful theorizing in Teasdale's paper makes it clear that what he labeled as a "lack of knowledge about depression" was merely a description, in negative terms, of an individual's set of beliefs about what the symptoms of depression are and whether the nature of depression is such health that seems oddly matched, though certainly not in contradiction with, Teasdale's avowed cognitive behaviorism.

\(^3\) In two previously published papers (1983a, 1983b), Teasdale had elaborated, at some length, on a cognitive model describing this "vicious circle".
that it is controllable. One can see, therefore, that beliefs about depression are the fulcrum for the dominant construct, depression about depression.

For Teasdale, individuals interpret their experiences of depression under the cognitively biasing effects of their depressions and in light of what they believe to be true (their "knowledge") about depression. According to this view, then, what individuals believe about depression, in conjunction with a negative depressive mindset, determines their perception of just how controllable their depressions are. Perceived controllability, in turn, directly conditions the disposition to become depressed about being depressed—the phenomenon Teasdale posited as responsible for the maintenance of depression.

In Teasdale’s scheme, beliefs that lead to a perception of depression as uncontrollable are borne at a great cost. As he put it, the consequence of such beliefs is that "patients will fail either to initiate or to persist with attempts at coping, reinforcing further their perception of depression as uncontrollable" (p. 160). This last statement, although dealing with the maintenance of depression, resonates with the "torpidity" that Farina and his colleagues suggested was the likely consequence of medical model beliefs about mental illness which shift the locus of control for personal problems to a realm beyond the individual.
Teasdale's argument logically progressed to this hypothesis: psychological treatments for depression that "work" by successfully reducing depression about depression. To explore this treatment hypothesis, Teasdale resorted to a post-hoc analysis of data from a previously conducted study, a trial of cognitive therapy for depression. The patients in that study were assessed with the Cognitions Questionnaire (CQ; Fennell & Campbell, 1984), which Teasdale described as "an instrument designed to measure aspects of depressive thinking in response to a series of hypothetical scenarios" (1985, p. 162).

There are eight CQ scenarios, each of which is rated on five dimensions related to a cognitive theory of depression. One of those dimensions is uncontrollability. Teasdale selected a CQ scenario depicting early morning awakening, and used the uncontrollability rating as a measure of depression about depression. He asserted that the measure was grounded in a scenario "specifically designed to examine negative thinking in relation to a situation that could be interpreted as a symptom of depression" (p. 162).

Teasdale's evaluation of his treatment hypothesis rested solely upon an analysis of subjects' responses to the one CQ rating item mentioned above. Unfortunately, whatever substantive merit may have resided in the treatment hypothe-

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34 The subjects were 38 outpatients in the care of general practice physicians. See report by Teasdale, Fennell, Hibbert, and Amies (1984), for a description and full study details.
sis was overshadowed by the fact that Teasdale’s attempt to empirically validate it—even, retrospectively—was nullified by the untenable operationalization of his key construct, depression about depression. Moreover, it is doubtful that Teasdale could have offered any argument sound enough to warrant the use of a single questionnaire response for the purpose of operationalizing a variable of such critical importance in his analysis. While this has to be counted as a serious flaw in the work, it is not an irremediable one and should not inhibit the application of more appropriate research methods to the evaluation of Teasdale’s extremely valuable hypothesis.35

Paradoxical beliefs: Helplessness and control?

A 1977 paper by Abramson and Sackeim will help us to consider a possible connection between the concept of uncontrollability as it appears in Teasdale’s "depression about depression" article and the use of the concept as developed by Seligman in his learned helplessness model of depression (1974).

After analyzing "belief systems in depression", Abramson and Sackeim concluded that a conceptual paradox was

35 Despite the inadequate evidence Teasdale offered for the treatment hypothesis itself, it is worth noting that his paper includes an outline for an effective psychological treatment of depression which many will undoubtedly find useful (pp. 160-162). The explicitly educational or didactic approach incorporated in Teasdale’s proposed treatment is surprisingly akin to the treatment approach proposed by Morrison (1976).
inherent in contemporary theories of depression, and they summoned evidence from numerous empirical studies to show that depressives' behavior is "congruent with the features of the paradox". The paradox was unearthed in what the authors regarded to be the two most prominent theories of depression: (a) Seligman's learned helplessness model of depression (1974) which centers on depressives' beliefs in the uncontrollability of outcomes, and (b) Beck's cognitive model (1967) which centers on depressives' propensity to believe that their personal responsibility is implied, in some manner, in almost all outcomes of which they are aware.  

Abramson and Sackeim conceptualized the crux of the paradox they discovered in terms of "the question of whether individuals assume responsibility for events that they believe they neither cause nor control" (p. 839). From the viewpoint of the present study, it is perplexing that Abramson and Sackeim did not think to train this question on the matter of depressives' beliefs about their own depressions. That is, why were the elements of the paradox not related to depressives' beliefs about the etiology and treatment of their own depressed conditions?

In the language of the paradox, as Abramson and Sackeim interpreted it, do depressed individuals assume responsibility for their depressions even when they believe that those depressions are neither caused by them nor can be controlled

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36 Both were reviewed earlier, in the section entitled "The Prevailing Cognitive Paradigm" (pp. 13-24).
by them? Do depressives' beliefs in the uncontrollability of outcomes extend to beliefs in the uncontrollability (of the outcome) of their own depressions? Does the depressive predilection for self-blame lead depressives to believe that they are causal agents in the maintenance of their depressed symptoms and they must, therefore, also be primary agents in the alleviation of those symptoms? And, of clinical importance, how do these paradoxical beliefs manifest themselves in the formation of a behavioral disposition vis a vis treatment for depression? 37

In hindsight one can see that some of the substance of these important questions were taken up in Teasdale's paper (1985) on psychological treatments for depression. Written a number of years after Abramson and Sackeim identified their paradox, Teasdale integrated elements of the paradox in his cognitively-oriented theorizing. In particular, there is clear conceptual linkage with Seligman's work. For example, Seligman's theorem that generalized belief in the uncontrollability of outcomes is the source of depression acquired new meaning through Teasdale's original narrowing of it. In its narrower, depression-specific form, belief in the uncontrollability of depression becomes the basis for Teasdale's theorem that "depression about depression" is the mechanism which maintains depression.

37 An important but less immediately practical question raised by the drift of this suggested inquiry is: Can, and do, depressed individuals conceive of depression per se in a way that is cognitively independent from the hypothesized defect in their cognition?
Further, a major goal of the psychological treatment program for depression proposed by Teasdale was very much in keeping with the gist of Seligman’s model. Teasdale’s treatment design was intended to restore depressives’ belief in a positive contingency between their efforts to control their depression and the perceived improvement of depressive symptoms (outcome). In light of the foregoing, it should not be surprising to note that both Teasdale and Abramson collaborated with Seligman in reformulating the learned helplessness model of depression as an attributional model of depression (1978).

Perceived Controllability and Need for Control

The collection of work reviewed thus far has varied in both style and method. The contributions made by the Farina group, for example, were macro-focused and tended to the rhetorical, whereas Teasdale made a micro-focused contribution characterized by precise stipulation of hypothesized mechanisms. In addition, given that none of the reviewed works appeared to directly influence one another, one would not expect to find a shared theoretical viewpoint clearly emerging from this selection of literature. It is quite evident, though, that these works all embraced the proposition that beliefs about illness (depression, or mental illness, generally) have major consequences because of the manner in which they shape perception of a given illness’ control-lability. In some cases, this factor of
perceived controllability was theorized in terms of the conventional internal-external dimensionality of the locus of control construct (need for control). In other instances, the construct of perceived controllability was given nuance by a construct of dependency.

In this commonality, one can discern the outlines of a burgeoning but coherent theoretical framework in which beliefs play a crucial role as cognitive antecedents of treatment response behavior.

Studies of Self-Care in Depression: Missed Opportunities

In light of the common perspective on illness controllability shared by the works reviewed up to this point, it will be useful to briefly return to a small and isolated but critical literature referred to in an earlier section on beliefs and health and illness behavior. This literature consists of a sprinkling of American (e.g., Doerfler & Richards, 1981) and European (see review by Böker, 1986) studies that have explored the self-care efforts of depressed persons.

None of those self-care studies included basic measures of locus of control, other measures of control, or measures of beliefs from which perceived illness controllability could have been inferred. The unfortunate nature of these omissions should now be obvious to the reader. Studies of

38 See pp. 40-41.
individuals' attempts at self-directed recovery from psychiatric illness present a unique opportunity for documenting the critical role that beliefs about illness controllability may play in regulating the activation of self-help behaviors. Evidence of this kind would most likely be generalizable, demonstrating that beliefs have the consequence of conditioning treatment response in the context of more orthodox, medically directed forms of treatment. The omissions in this literature are particularly grievous from the point of view of the present study because the self-care studies were specific to depression.

Beliefs as Causal Attributions

Now that the initial collection of studies has established the basic outlines of a relationship between illness beliefs and their consequences, we will turn to an important review essay by Kopel and Arkowitz (1975). The emphasis in their monograph remains on the treatment consequences of beliefs but the focus shifts to involve a different class of beliefs and a different type of consequences than has been heretofore considered. Kopel and Arkowitz mostly attempted to extrapolate from two significant lines of social psychology research--attribution and self-perception--with the aim of proposing procedural enhancements of behavior therapy. The aspect of their paper most pertinent to this review centered on the role of the self in perceived causality, or in other words, what individuals come to believe
their role was in bringing about desired behavioral changes. This contrasts with the previously cited works whose pertinent aspect centered on perceived illness controllability.

Perceived causality cognition occurs in the aftermath of a behavioral response, i.e., once a behavioral program has been enacted. Perceived controllability cognition, on the other hand, occurs on the "front end" of the experienced symptom-behavioral response chain, i.e., prior to the initiation of response behavior. The consequences of both kinds of beliefs are grossly similar, however. Whether response to depression leads to treatment which is self-directed or other-directed, both kinds of beliefs exert a fundamental influence on antidepressive response, its intensity and the behavioral form it is likely to take.

Kopel and Arkowitz argued for their chosen cognitive emphasis in the following manner: "In general, the [self-perception] research in this area [of attributional analysis] has demonstrated that perceived causality (causal attribution) may play an important role in the interpretation of our behavior. Thus, perceiving a change in one's behavior as primarily caused by oneself (self-attribution) appears to be associated with different subsequent behavioral effects compared to instances where the behavior change is explained by the influence of extrinsic controlling factors (external attribution)" (p. 179).

The "subsequent behavioral effects" to which Kopel and Arkowitz addressed themselves were the maintenance and gen-
eralization of healthful behavior changes. Accordingly, they marshalled evidence to support the "basic principle...that self-attributed behavior change is maintained to a greater extent than is behavior change which is attributed to an external agent or force" (p. 183).

In the conceptual language of some previously discussed investigators, such as Farina, and Morrison et al., the "basic principle" which Kopel and Arkowitz advanced implies that psychosocial beliefs about mental health problems allow for durable self-attributed behavior change, while medical model beliefs are associated with less lasting, externally-attributed behavior change.

To partially substantiate their claim regarding the consequences of attributional beliefs, Kopel and Arkowitz drew on the results from some widely cited research reports of pointed relevance to the present study. These were reports of drug therapy situations; one, an experimental analogue, involving pain tolerance (Davison & Valins, 1969), and the other, involving the actual clinical treatment of insomnia (Davison, Tsujimoto, and Glaros, 1973). In both cases, researchers concluded that subjects who exhibited greater maintenance of behavioral changes did so because they were able to attribute those changes to features of their own activity, as opposed to subjects who could only reasonably attribute changes in their behavior to the action of drugs which they had taken. It must be pointed out, however, that Grimm (1980) strongly refuted the validity of
both of these findings on the grounds that both studies were methodologically flawed, and suffered, in particular, from inappropriate statistical analyses.

Subsequent to Grimm's objections, Liberman (1978) reported results from a study of members of outpatient group therapy that supported the "basic principle" enunciated by Kopel and Arkowitz. Three months after treatment, improvements were seen to be significantly more lasting among group members who believed that their activity, as opposed to the efficacy of medications, had been responsible for desired changes.

A fuller appraisal of the claim, asserted by Kopel and Arkowitz, that treatments which promote self-attribution of behavioral change lead to therapeutic gains that are more likely to both last and generalize, can be achieved when evaluated in light of the follow-up outcome from studies comparing psychological and drug treatments. For the purposes of the present study, one such follow-up investigation from a comparative study of treatments for depression will be examined.

A Follow-Up Study of Outcome in Treatment for Depression

In a 1986 paper, Simons, Murphy, Levine, and Wetzel gave a meticulous accounting of their (one-month, six-month, and one-year) follow-up of 70 nonbipolar, moderately depressed, first-time outpatients who completed 12 weeks of active treatment. Their analysis concentrated on the post-
treatment course of the 63% of their sample who initially displayed a successful response to one of four different treatment conditions. One condition was pharmacotherapy with a tricyclic antidepressant (TCA; nortriptyline hydrochloride); the three other conditions involved a specified form of psychotherapy called cognitive therapy.

Simons et al. found that patients who had been in one of the cognitive therapy conditions were less likely to relapse during the one-year follow-up period than were patients who had been in the pharmacotherapy alone condition. Of the sustained improvement they observed in the cognitive therapy patients, Simons et al. commented: "The results of this study suggest that patients who have responded to CT [cognitive therapy] may be protected against the reappearance of depressive symptoms during the one year following treatment. Patients who responded to medication, conversely, appear to have a higher risk of relapse" (1986, p. 47).

When combined with their own findings, Simons et al. 's review of findings from similar follow-up studies of comparative treatments for depression (see 1986, pp. 44 and 48; e.g., Kovacs, Rush, Beck, & Hollon, 1981), leaves little doubt that effective psychotherapies produce more sustained improvement in depressed patients than do treatments based

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39 These were either cognitive therapy alone (CT), CT plus TCA, or CT plus drug placebo.
on giving antidepressant medications alone\textsuperscript{40}. Despite the relatively solid status of this finding, Simons et al. took pains to call attention to the fact that research had not yet succeeded in generating the kinds of data that could elucidate exactly what mechanisms were responsible for the durable improvement associated with cognitive therapy (in particular). These clinically significant but ultimately unclear results reported by Simons et al. invite speculation.

Undoubtedly, multiple factors are responsible for the comparatively more durable effects of cognitive therapy. A frequently voiced and reasonable explanation for this durability is ascribed to an essential component of the therapy, the acquisition of specific depression-control skills. This is only one explanation, however. The same follow-up data can be interpreted just as plausibly in terms of the thesis put forward by Kopel and Arkowitz (1975). Namely, that patients who receive psychotherapy are engaged in a form of treatment that permits them\textsuperscript{41} to attribute symptom changes.

\textsuperscript{40} In this regard, the publication of outcome results from the 6-month, 12-month, and 18-month follow-up investigation in the NIMH's Treatment of Depression Collaborative Research Program should prove momentous.

\textsuperscript{41} The use of the word "permit" here is intentionally neutral. It sets up a minimal description of the attributional belief parameters associated with psychotherapy. It could be argued, however, that psychotherapies are not, in fact, so neutral. That is, they purposively foster beliefs about self agency and illness controllability with the aim of reaping the beneficial consequences of self-attributed change. This may be especially operative in cognitive therapy which is strongly connected to theories of self-control. For example, in speculating about their follow-up findings,
and improved functioning to their own efforts, while pa-
tients who receive only medication do not have the possibil-
ity of seeing their improvement in the same way. In this
manner, the durability of treatment effects is tied to
differences in patients' beliefs about the causal agent in
their improvement.

This "alternate" interpretation received strong support
from Simons et al.'s finding (1986) that sustained improve-
ment at one-year follow-up was, even, observed in patients
who received cognitive therapy in addition to receiving drug
or placebo drug treatments. This suggests that as long as
patients were in treatment conditions which included psy-
chotherapy, then, this allowed them to attribute, at least,
some aspect of whatever benefit they experienced from their
total treatment to that aspect of their treatment which was
rooted in their own agency.

One of the points made manifest by this literature is
that the conflicting claims regarding the merits of self-at-
tributed change will not be close to settlement until fol-
low-up phases of comparative treatment investigations in-
clude direct assessments of subjects' causal attributions
for the behavioral/symptomatic improvements they experience.

Simons et al. (1986) referred to "the self-help message of
CT [cognitive therapy]" (p. 47) as an implicit treatment
factor that may have differentially benefitted subjects who
received cognitive therapy.
Reckoning the Scope of Belief Consequences

Juxtaposed with the literature first reviewed in this section on illness controllability, the paper by Kopel and Arkowitz (1975) helpfully illustrates that different kinds of beliefs can have parallel kinds of behavioral consequences. In considering the consequences of mental health beliefs, it is useful to keep in mind that these consequences can be quite varied, pervasive, and deeply, if subtly, affecting.

In this regard, Young, an anthropologist, has written thoughtfully about some of the consequences that can follow from subscribing to medically-oriented beliefs (1976). He reasoned, for example, that medical (model) beliefs enjoy a special social power to "exculpate" sick persons, diminishing the deviance associated with any illness-related loss of their customary role functions (pp. 14 ff). Young also proposed that medical beliefs have more occluded, ontological consequences, in that they simultaneously give shape to and confirm one's very sense of reality (pp. 17 ff). While these observations were made in a general context, they could be applied, with informative effect, to a broadened understanding of the consequences of mental health beliefs.

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42 Although, Farina and his collaborators made the express point of indicating that the data from their subject samples provided no evidence of such an exculpatory attitude, at least, not toward "mental" illness (Farina et al., 1978, p. 278; Fisher & Farina, 1979, p. 326).
An Important Attributional Framework

Towards the aim of developing a better sense of the full compass of consequences which can accrue from beliefs about mental health and illness (of which beliefs about depression partake), we turn now to carefully review a theoretical paper by Brickman, Rabinowitz, Karuza, Coates, Cohn, and Kidder (1982). In this seminal work, the authors undertook to define the entire domain of personal problem solving by articulating four general models "that specify what form people's behavior will take when they try to help others (or to help themselves) and what form they expect recipients' behavior to take" (p. 381). They derived their models by distinguishing between two types of attributional beliefs: beliefs about the locus of responsibility for problems and beliefs about the locus of responsibility for solutions to those problems.

Once a problem is recognized, the question of what can be done about it is often posed in order to determine whose problem it is, or, in other words, to locate who will be responsible for solving it. And indeed, close inspection reveals that, in many instances, beliefs about the controllability of problems are the strategic source for both types of responsibility attributions upon which Brickman et al.'s models are built. In fact, much of the substance of Brickman et al.'s theoretical scheme falls into line with work that has already been reviewed in this section. Yet, their moral, medical, compensatory, and enlightenment models
describe a conceptual framework which is so inclusive and powerfully heuristic that it amounts to an immensely serviceable theoretical system, and not a merely redundant (if elegant) one. With that in mind, a few of the points of resemblance between the framework offered by Brickman et al. and the literature previously reviewed will be highlighted.

A few points of resemblance

To begin with, the authors intended their models to represent "four fundamentally different orientations to the world [emphasis added], each internally coherent, each in some measure incompatible with the other three" (p. 369). In doing so, they encompassed a conceptual space possessing the kind of ontological dimension to which Young (1976) had addressed himself.

Secondly, in elaborating their version of the medical model, a model in which people have the least responsibility for either problems or solutions, Brickman et al. make very familiar use of the construct of control: "The medical model in our sense refers not only to cases in which people are thought to be victims of disease but to all cases in which people are considered subject to forces that were and will continue to be beyond their control" (1982, p. 372). They found this model deficient because it fostered dependency. The study by Morrison et al. (1977), reviewed earlier, figured prominently in the evidence they presented to support this view.
Their moral model, on the other hand, which places the greatest responsibility on people for both their problems and the solution to them, presented an approximate reflection of the psychosocial belief orientation that had been such an integral aspect of the works of Farina and his coworkers (and in Morrison et al.). Brickman et al.'s moral model, however, tends to an extreme rendering of the psychosocial position, one which too easily arrives at a severe credo dictating exclusive reliance on self-help. And, the authors themselves recognized the potential in the model to incline toward the folly of omnipotence: "...in leading people to believe that they are responsible for all things, it [the moral model] may lead them to believe that all things are possible" (p. 371).

**Typical consequences of beliefs about responsibility**

Of greatest value to the present study was the part of Brickman et al.'s work in which they trace out some of the typical consequences of beliefs about the locus of responsibility in the realm of psychological interventions.

The authors' theorizing about consequences was organized around the basic premise that help-getting and helping experiences are governed by the kind of assumptions about the responsibility for problems and solutions that fit one of their four models. The chief consequences of attributional beliefs were conceptualized as proceeding from
something of an assumptional synapse\textsuperscript{43}, i.e., an interface where help givers' and help recipients' beliefs about "who is responsible for what" commingle. On this theoretical base, Brickman et al. maintained that the nature of consequences were analyzable in terms of a) the relative congruence of help givers' and help recipients' assumptions, and b) attributes of the problem for which help is needed.

Brickman et al. identified three main classes of consequences. One class of consequences was like that discussed by Kopel and Arkowitz, relating to self-attributed vs. externally-attributed change. These consequences were held to affect help givers' and help recipients' residual sense of competence, i.e., their generalizable capacity for helping oneself or for helping others.

A second class of consequences was shown to particularly affect help recipients' active sense of control in solving problems, and help givers' self-esteem. It was held that a third class of consequences affects the solidarity and stability of the help giver-help recipient relationship.

"Choice of models"?

It is natural to suppose that the attributional beliefs comprising Brickman et al.'s models, beliefs hypothesized to accompany helping/coping endeavors, operate on an implicit cognitive level. This seems so, in part, because it is difficult to accept that people are conscious, in any meaning-

\textsuperscript{43} 'Assumptional synapse' is the author's notion.
ful sense, of the choices they make about which set of assumptions to apply in situations in which they or others need help. Yet, in introducing the section of their paper which deals with consequences, Brickman et al. use the phrase "choice of models", a phrase that connotes such conscious volition.

When the authors attempt to infer, from behavioral data reported in various studies, the appropriateness of applying certain belief models to given helping situations, it seems the standard fare of conceptual analysis. When they employ the notion that individuals "choose" to apply the assumptions of different models in problematic situations, however, it strikes one as odd.

The abundant value of Brickman et al.'s conceptual framework lies in its potential for use in social policy analysis, in the redesign of helping institutions, and in program planning. In these arenas, "choice of models" language seems particularly well suited. Perhaps, by couching their discussion in terms of "choice", the authors' intent was to call attention to the fact that their conceptual framework is an analytic tool that makes a conscious choice of models possible through a systematic contemplation of consequences.

**Implications for psychiatry and psychotherapy**

Following an analysis of the pattern of consequences which flow from the choice of each of their four models,
Brickman et al. formulated the hypothesis that "models in which people are held responsible for solutions (the compensatory and moral models) are more likely to increase people's competence than models in which they are not held responsible for solutions (the medical and enlightenment models)" (1982, p. 375). Some of the particulars of this hypothesis were amplified in relation to psychiatric problems, with the authors citing some of the studies previously mentioned here (e.g., Davison & Valins, 1969; see 1982, pp. 375-376). Of probably greater interest, though, for being more unique, Brickman et al. employed their system of attributional concepts to analyze the enterprise of psychotherapy.

Psychotherapy

They surmised that "different forms of psychotherapy make different assumptions about the nature of the problem and the solution, assumptions that may be well suited to certain categories of patients and ill suited to others" (1982, p. 379). For instance, the authors viewed the assumptions of cognitive behavior therapy to be most compatible with their most favorably appraised model, the compensatory model (p. 377).

The assumptions of the compensatory model attribute little responsibility to people for their problems, but great responsibility is attributed to them for solving them. These assumptions are certainly consistent with the general
tenets of behavioral therapies which have traditionally sought to invest clients' energies in active treatment solutions to current problems while avoiding belabored exploration of possible causes rooted in the past.

**Optimal models for treating depression**

Brickman et al. went on to speculate about whether given models could not be preferentially applied to the treatment of certain psychological disorders for the purpose of achieving an auspicious congruence "with the patient's or significant others' assumptions about who is responsible for what" (1982, p. 380). As an example, they contrasted the internal attributional orientation of depression, conceptualized as "a state in which people are preoccupied with themselves as the apparent source of insoluble problems", with the external attributional orientation of phobias. Unfortunately, the specific treatment implications of this contrast were not made apparent.

Confusion, stemming from the contrast, particularly in regard to depression, raised several issues. It seems reasonably clear that Brickman et al. were implying that the most successful approaches to the treatment of depression should embody the assumptions of models which attribute, to the depressed person, significant responsibility for his or her problems, i.e., for being depressed. The rationale for this, however, is not discernible in their writing.
By characterizing depression as a state of being, the authors left it unclear whether applying models which attribute responsibility for problems to depressed people makes for successful treatments because such treatments are congruent with depressed mood, or because they are congruent with depressed cognition.

The waters were muddied further when a passing reference was made to "mood-elevating drugs" as a successful treatment. The mention of drugs in this context could have indicated the suggestion that the most successful treatment approaches should embody the assumptions of models which do not attribute, to depressed people, responsibility for the solutions to their problems (depression). Presumably, the reason for recommending those models is that their attributional orientation would be experienced by individuals mired in the oppressive internality of depression as relieving.

When all the related passages are collated, it logically leads to the conjecture that Brickman et al. were suggesting that the most promising treatments for depression should be based on an application of their enlightenment model—a model which holds that individuals are responsible for their problems but not for the solutions to them. One is frustrated to note, however, that had Brickman et al. made such a suggestion it would have contradicted their openly stated preference for the compensatory model—a model which holds that individuals are not responsible for the development of their problems but are responsible for finding
and enacting solutions to them. That was the model to which they had linked cognitive behavior therapy. Moreover, endorsement of the application of the enlightenment model to the problem of depression would have flown directly in the face of empirical research that has demonstrated cognitive behavior therapy to be one of the most successful treatments for depression.

In calling for an analysis of congruence between disorders, patients' attributional assumptions, and the assumptions in which different treatments are grounded, Brickman et al. raised the prospect of uncovering a new and highly valuable source of clinical information. What was, in fact, revealed, however, by examples of the proposed analysis offered in their article—such as the one cited earlier contrasting phobias and depression—was that that prospect amounts to little more than a muddle without adequate specificity.

In addition, to revealing some fairly impenetrable ambiguity the depression-phobia contrast revealed a greater complexity than is likely to be accounted for by just the attributional distinctions of Brickman et al.'s conceptual framework; despite the comprehensiveness of that framework. For instance, it takes little imagination to contemplate depressed persons who cognitively attribute no direct responsibility for their problem to themselves (e.g., "depression results from a defective gene"), and who cognitively attribute no responsibility to themselves for solu-
tions to their problem (e.g., "depression is a medical prob-
lem for which psychiatrists are responsible"), but who feel,
nevertheless, a compelling need to be a part of the solution
to their problem. This example might well illustrate the
case of depression in high-powered executive types who are
accustomed to playing a leadership role in problem-solving,
but who are also apt to apply the attributional assumptions
of the medical model to their own problems with depression.

Ambiguities and possible shortcomings notwithstanding,
Brickman et al.'s paper presented a more than useful concep-
tual scheme. It fills out and reinforces our understanding
of the consequences of beliefs by focusing on a particular
strain of beliefs in the cognitive foundation of helping
(and therapeutic) activity. Furthermore, it made a major
contribution to the present study by demonstrating that be-
liefs about problems (etiology) and beliefs about solutions
(treatment) can operate as distinct motivational elements,
and that an adequate measurement of beliefs about depression
needs to assess each independently.

Control, Beliefs, Consequences

At this point, the literature reviewed in this section
will be summarized. This summary will be followed by a con-
cluding, brief consideration of the consequences of beliefs
as they pertain specifically to the treatment of depression,
the focus of the inquiry at hand.
A reading of this literature leaves one with the overwhelming impression that the construct of control is the essential explanatory element to which each of the reviewed sources refers in approaching the question of beliefs and their consequences. In particular, two representations of the construct are drawn upon most heavily, perceived controllability of illness, and sense of effectance.

In this literature, the perception of illness controllability is modeled as a cognitive process shaped by beliefs about a target illness. The sense of effectance is modeled in a somewhat more complex fashion. It is more of an ego-oriented motif incorporating clear cognitive-behavioral correlates: feelings and beliefs about one's competence, the propensity to perceive oneself as a causal agent, and a need to resolve personal difficulties through exercising one's own powers.

In both guises (effectance and perceived illness controllability), control constructs appear in this literature to exert influence as prime motivating factors which condition the manner in which individuals respond to their problems. Moreover, as the Kopel and Arkowitz' essay (1975) demonstrated, beliefs related to control constructs serve as mediators of treatment-related behavioral consequences.

The concept of perceived controllability was most often mentioned in connection with the term "illness", which is why it is being used here. However, the concept can be applied with equal appropriateness to the broader term, "problems", a term more suited to the framework elaborated by Brickman et al. (1982), for example.
whether their influence is prospective or retrospective in nature.

The construct of control has become so sharply etched in this section of the literature review through an effort to comprehend the consequences of beliefs. As part of that process, the construct of control has helped to impart specific substance to the central proposition of the present study, namely, that beliefs about an illness and its treatment are the heart of the matrix of forces which motivate response to illness, especially responses which encompass engagement in treatment.

By appreciating the control construct as a critical element of the cognitive foundation which underlies behavioral response to depression, the reader is well prepared to encounter the author's model of belief-mediated response to depression.

Some Consequences of Beliefs about Depression and Its Treatment

With a summary of it fresh at hand, this is a good juncture at which to reflect on this literature in relation to the key theme of the present study--the consequences of beliefs, specifically, about depression and its treatment. This requires, however, an initial clarification of two important points.

First, in the ideas which will be entertained here about the consequences of beliefs, beliefs will be situated on two continuua of ideological orientation. This ideologi-
cal approach to the consequences of illness beliefs in the area of mental health is almost identical to that used by Farina and his coworkers (e.g., Farina, Fisher, Getter, & Fischer, 1978). According to the scheme adopted for the present study, however, beliefs range in their degree of psychosocial orientation, or in their degree of biomedical orientation.

Second, the literature reviewed in this section noticeably inclines toward an unbalanced view of the nature of belief consequences. An attempt will be made to redress that imbalance immediately below.

An Irrelevant Ideological Bias

This literature rather conspicuously promotes the benefits of psychosocially-oriented illness beliefs and psychosocial treatment. What is more, contributors to this literature have sought to expose the serious potential detriment they deemed to be associated with biomedically-oriented beliefs. This unevenness in emphasis is a decided weakness of this literature because it obscures the ideological neutrality of the fundamental fact that beliefs, whatever their ideological direction, have important consequences for illness response and treatment outcome.

Ideological positions which are taken in relation to the observable connection between beliefs and consequences have absolutely no bearing on the clinical status of the connection itself. In fact, it is likely that ideological
posturing is distracting and reduces awareness of the connection. Readers are apt to dismiss research results which substantiate a one-sided connection between beliefs and consequences as little more than a foil for partisan rhetoric.

It should be made clear that the polemical bent to be found in the works on belief consequences reviewed here in no way serves the ultimate clinical rationale of the present study. The point of view of the present study is that the chief value in analyzing individuals' illness beliefs lies in appreciating the consequences of those beliefs in terms of response to illness. In particular, the principal contemplated application of such an appreciation of belief consequences is to pair depressed individuals with treatment interventions from which they are most likely to derive the greatest benefit. This approach to beliefs and their consequences is wholly divorced from the advocacy of any one belief orientation over another.

There is ideology implicit in the present study, but it is restricted to a conviction about the superiority of individualized, assessment-based treatment for depression. In that regard, the analysis of beliefs and consequences is seen as part of a clinical endeavor for which no single belief orientation could be appropriate or suffice.

Towards a More Balanced View of Belief Consequences

Towards developing a more balanced view of belief consequences, let us first recapitulate, in terms specific to
the problem of depression, the pronounced psychosocial bias repeatedly expressed throughout the literature reviewed here.

Consistent with the views promulgated in the various works of this literature is the idea that a uniformly biomedical belief orientation (with respect to the etiology and treatment of depression) has the effect of minimizing the possibility that depressed persons will exploit their unique resources in efforts—self-directed and otherwise—to counteract their symptoms and master their depressions. The rationale associated with this idea is that a biomedical orientation impugns attempts to personally control depression by fostering beliefs which, by and large, construe depressive phenomena as emanating from and existing in a random biological realm that is autonomous from the human will.

The favored, psychosocially-oriented position in the literature gains, of course, by contrast. Consistent with the psychosocially-oriented position espoused in the works reviewed is the idea that most of the beneficial consequences of a uniformly psychosocial belief orientation (with respect to the etiology and treatment of depression) derives from a logic that validates both the meaningfulness and usefulness of personal striving to control depression. Also touted as a virtue of psychosocial belief orientations is the way that the success which follows from personally involved efforts at counteracting depression, even limited
success, tends to generalize, stimulating a positive cycle of enhanced self-esteem and further attempts at mastery.

To remedy the imbalance represented by the views just recapitulated, we can take note of a few instances in the literature (despite it being a stacked deck) which clearly indicate that an archly psychosocial belief orientation has serious pitfalls.

**Excessive self-reliance: A related vulnerability of psychosocially-oriented beliefs**

Brickman et al. (1982) identified a drawback inherent in one of their attributional models, the moral model, as the foible of assuming exclusive responsibility for the solution to one's problems. Brickman et al.'s moral model closely resembles a purely psychosocial orientation in that it appears to be premised on the possibility that one could be personally responsible for enacting the solution to one's problems. Thus, the attributional set of the moral is compatible with individuals who believe that all aspects of depression lie strictly within their control.

Although an extreme psychosocial belief orientation does not per force incorporate the kind of attribution of exclusive self-responsibility which is embodied in the moral model, there seems to be an unmistakable affinity between the assumptions of the moral model and the psychosocial belief orientation. Results from a study by Yokopenic, Clark, and Aneshensel (1983) show this affinity to be a source of
real vulnerability for individuals who subscribe to a purely psychosocial orientation. In a community study of 1,000 adults in Los Angeles County, they found that a possibly excessive self-reliant attitude was the major barrier which kept people from obtaining the help which they needed with their depressions (p. 22).

The "uses of hopelessness"

Perhaps the strongest general argument in favor of a biomedical belief orientation and against the adoption of a psychosocial one is set forth in a short but thoughtful paper based on case vignettes, by Bennett and Bennett (1984).

The authors mount their argument by first calling attention to the fact that "the lack of evidence linking mental illness with random physical correlates has encouraged the overuse of theories that attribute causal responsibility to factors within human control" (p. 559). In consequence of this state of affairs, Bennett and Bennett's would argue that depressed people avidly subscribe to psychosocial beliefs about depression because they would prefer to believe that their condition is, to some degree, tractable via efforts at achieving personal control. The alternative is the frightening belief that one is "the victim of bad luck", i.e., a victim of the biochemical roulette which the authors purport to be responsible for depression.

Following Bennett and Bennett's reasoning, the true aim of subscribing to a psychosocial theory of causality about
depression which "places primary responsibility on a factor that is responsive to human effort" would be to "sustain false hope and deny the helplessness of our vulnerability to bad luck" (p. 559). According to the authors point of view, however, one of the costs of the denial implicit in psychosocial beliefs is that it leads the depressed individuals who endorse those beliefs to harbor "excessive expectations for change and cure".

It is especially interesting to note that Bennett and Bennett reported on four cases in which they had success employing a psychosocial treatment method. That method was founded on a psychotherapeutic strategy of inducing in their patients the externally located sense of control characteristic of biomedical beliefs.

The authors concluded their brief against the often unanticipated liabilities of psychosocially-oriented beliefs by extolling the liberating, if somewhat unorthodox sounding, "uses of hopelessness" which they associated with biomedical beliefs: "In the acceptance of helplessness and hopelessness lies the hope of giving up impossible tasks and taking credit for what we endure. Paradoxically, the abandonment of hope often brings new freedom" (p. 562).

45 One case involved a young woman hospitalized for severe depression.
Beliefs and Their Consequences: Ideologically Neutral and Individually Specific

Hopefully, the two foregoing arguments have helped to establish a more balanced view of the consequences of beliefs; one which will also help to reinforce the idea that belief consequences are ideologically neutral. The question of whether a given belief orientation has generally pernicious consequences while an opposing orientation has generally salutary ones can not be suitably determined as a general matter. The relative costs and benefits of the consequences which accrue from beliefs can only be judged for given individuals.

Consonant with treatment researchers' countless admonitions to conceptualize treatment in highly specific terms, the predictive and explanatory power of a treatment variable like beliefs about depression resides in its specificity. Sorting out those instances in which one depressed person will gain from biomedically-oriented beliefs and another will gain from psychosocial-oriented ones can only be approached from a proper understanding of the highly individualized matrix of social, cognitive and motivational factors from which beliefs about depression arise. This critical understanding must also extend to an appreciation of a number of settings which are significant for the depressed person, and, where relevant, to an appreciation of the psychologically charged meanings of the setting in which treatment occurs.
SECTION E.

THE SOCIAL NATURE OF COGNITION ABOUT DEPRESSION: ILLNESS BELIEFS AS UNITS OF ANTHROPOLOGICAL STUDY

The literature on belief consequences, reviewed in the preceding section, was deemed to be of particularly great importance by virtue of its direct clinical applicability. The literature reviewed in this section is of equal importance to the present study, but because of the macrolevel, interpretive perspective on beliefs about depression it offers. It illuminates the subject and its behavioral significance in a manner in which previously considered sources did not.

The perspective which emerges from the literature reviewed here is the product of a cultural analysis that creates a revised, expanded understanding of the interrelation among the topics of 'cognition', 'beliefs', and 'depression'. Several subdisciplines of sociology and anthropology (the sociology of knowledge, medical anthropology, cognitive anthropology, and the ethnography of illness, to name a few) share this approach, and their work is heavily represented in this section.

In addition, unlike any of the previously reviewed literatures, most of the literature reviewed in this section is specific to depression. Moreover, the specificity of this literature is propitiously combined with an approach to
cognition closely resembling the author's focus on cognition related to depression as opposed to cognition affected by depression. As a result, it is in this literature that one first encounters work directly concerned with beliefs about illness, in the instance of depression, i.e., illness beliefs about depression.

The Cultural Analysis Dominating This Literature

Due to the length and importance of this review section, it will be helpful to initially familiarize the reader with a few of its more salient characteristics.

In this section, depression is regarded from the point of view of a cultural analysis which is (a) constructionist in its assumptions, (b) interpretive in its aims and method, and (c) originates in a critical distinction between traditional psychiatric notions of depression as a disease entity versus anthropological formulations of depression as an illness experience. This latter distinction will be elaborated on, below.

For the moment, it will be helpful to recognize from the outset, that an ethnographic orientation epitomizes this section of literature. It presents culture as a context which endows illness beliefs about depression with intelligibility and substance. Much of what follows in this section, therefore, is devoted to appreciating given aspects of this cultural context.
This undertaking to set forth the cultural context of illness beliefs about depression will, hopefully, elucidate the following matters: (a) some of the sources of belief content for beliefs about depression; (b) the manner in which beliefs function for the members of a culture, giving meaning to their experience of depression; and (c) the pathways in which beliefs operate, guiding the behavior of depressed individuals in their response to their depressed "condition"—including, but not restricted to, the process of seeking out and engaging in treatment.

The Meaning-giving Systems of Culture

This section's direct focus on culture and illness beliefs stands in marked contrast to the foci of earlier sections. In the previously reviewed literature, the workings of culture in shaping individuals' conceptualizations of their illness (depression), and in conditioning their responses to it, were either mainly overlooked, taken for granted, or acknowledged in only the most general terms. For instance, it was seen that the literature dealing with the behavioral ecology of treatment established, in a general fashion, that beliefs were a crucial aspect of the social context which influences treatment relationships. What the roots of that psychosocial influence were, or how it was

46 "Beliefs within the Behavioral Ecology of Treatment for Mental Illness", pp. 47-82 this dissertation.
wrought, were matters left unexplored and unexplained by that literature, however.

This section is motivated by the argument that in order to gain insight into the specific nature of the influence that beliefs have on treatment, we must look to the very source of beliefs, in the meaning-giving systems of culture. The underlying premise of this argument is that individuals arrive at conceptionalizations of their maladies through the medium of culture (e.g., Fabrega, 1979; Kleinman, 1980; Wallace, 1972; Young, 1976). By dint of such reasoning, culture offers the key to zeroing in on the impact that idiosyncratic illness meanings of depression have on an individual's behavioral response to his or her depressed condition.

A Macrolevel Anthropological Perspective

This section features a distinctive, macrolevel anthropological perspective which provides several important elements that have been missing from foregoing discussions of literature pertaining to beliefs about depression.

First, an anthropologically fashioned approach to the study of depression—notably, one based on the concerns and methods of the ethnography of illness—offers an initial look at some of the specific content of beliefs about depression. This type of specific content is peculiar to the kinds of cultural assessments anthropologists refer to as 'emic', i.e., "...the evaluation of the patients' [sic]
disorder by members of the culture [emphasis added], their representation of the disorder using illness categories and explanatory forms, and thus the social and cultural configuration of depressive illness..." (Kleinman & Good, 1985, p. 33).

Second, the kind of framework which derives from an anthropological study of illness beliefs has the advantage of unifying a number of different perspectives on beliefs and the response to depression. It enables the integration of these different perspectives into a single model of illness behavior and treatment response in depression.

Before proceeding to a review of the particular anthropological sources from which this framework is drawn, we will first consider some aspects of depression as a cognitive category. It will be shown that these aspects make cultural analysis an especially appropriate, if not obligatory, tool for studying depression in the mass, post-industrial societies of the West.

**The Cultural Determinancy Of Cognition About Depression**

Several characteristics specific to depression underscore the cultural determinacy of beliefs about depression. Taken together, these characteristics significantly amplify the role which beliefs play in determining the outcome of depressive episodes. Before looking at them, a brief clarification is in order
concerning the use and appearance of the terms 'knowledge', 'beliefs', and 'cognition' in this work.

A Clarification: Depression as a Category of Knowledge

In social science literature, one notices a tendency for authors to use a variety of related terms almost interchangeably when referring to cognitive function. Occasionally, a qualifying explanation will accompany the choice of frequently used and key terms. Being no exception, the area of literature currently under review poses a special problem because of the present project's concentration on a specified mode of cognition, belief.

In this dissertation 'depression' is considered, for the most part, as a category of experience. Sometimes, it is considered as a category of psychiatric nosology. In the passages to follow, however, great attention is focused on 'depression' as a category encompassing a range of phenomena about which people think, believe, draw inferences, have knowledge, etc. Because the kinds of things people think and believe about depression are apt to be matters of public knowledge, and are socially acquired, socially exchanged, and have implications for social relations, depression has been treated as a category of social cognition by some of the authors whose works will be examined below.

When depression is considered as a cognitive category, the contents of that category are, to a large degree, propositional in nature; that is, they assume the form of
statements which relating a subject to a predicate. With respect to the propositional content of people's knowledge of depression, the author maintains that what people know about depression is essentially what they believe to be true about it. In other words, their knowledge of depression consists primarily of their beliefs about it. While this most obviously applies to members of the lay public, it also applies to members of the scientific-professional sector (as will be shown in the constructionist critique which appears several paragraphs below).

By virtue of the fact that people's knowledge of depression is mainly embodied in their beliefs about it, the author has regarded the terms 'beliefs' and 'knowledge' (about depression) as interchangeable, and has used them as such. The more general term 'cognition' has been used in order to suggest the full spectrum of human mental activity, with all its epistemological shadings--from the suppositional quality of 'thought' to the affective tone of conviction associated with 'belief'.

While the distinctions raised by this clarification of terms apply throughout the dissertation, they are raised in this section of the literature review because of their heightened relevance for the works to be discussed here.

The Universality of Depressive Experience and the Ambiguity Surrounding It

To appreciate the manner in which culture determines our knowledge about depression, one must first be mindful of
the universality of depression—an apparently rare characteristic among mental disorders. Both a voluminous historical record (e.g., see Beck's 1967 review of this material) and numerous epidemiological and cross-cultural studies (see reviews by Marsella, 1981, and Marsella, Sartorius, Jablensky, & Fenton, 1985) attest to the fact that depressive experience is ubiquitous both within the human family and across the span of human history.

A second characteristic of depression to take note of has to do with what has been entitled the "ambiguity and controversy" which surrounds it—the subject of an entire book chapter by Coyne (1986). In depression literature, comments on the timeworn and extensive controversy over the nature of depression which occupies both research scientists and clinical practitioners have become commonplace. A particularly heated aspect of the controversy has to do with the extent to which the essential pathology of depression is regarded as biochemical versus psychological. As recently as 1986, Coyne observed that "...definitional problems continue to plague the study of depression, and they are not going to be readily resolved" (p. 1). Moreover, he issued the caution that "one should probably be skeptical about any decisive statement about the nature of depression" (p. 2).

Universality, controversy, and ambiguity: Their combined effect

The universality of depression appears to impart an extra dimension to the scientific controversy which
surrounds it. Because there is such a broad base of personal experience with depression, the continued inability of the scientific community to reach consensus on an authoritative definition of it has spawned an ambiguity that pervades all strata of human commerce. This ambiguity about depression creates a kind of cognitive vacuum which folk beliefs (or lay conceptions) and professional ideologies, alike, rush to fill.

Townsend pointed out that coherent folk models of mental illnesses are products of the kind of consensual communities which are typical of traditional, agrarian-based societies (1975, p. 747). By contrast, the mode of life in technologically-advanced societies is not congenial to the propagation of coherent folk models of mental illness. As a result, members of the mass cultures typical of the large nation-states of the West tend to find themselves in a situation in which they possess neither a sanctioned, scientifically articulated model of depression nor an unauthorized but coherent folk model of depression. This leaves the members of these "advanced" cultures without a well organized system of illness beliefs and concepts about depression which is either readymade or near at hand.

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47 These models which often strongly implicate the activity of nonmaterial agencies.

48 That is to say, unless (a) they are migrants, newly transplanted to their urbanized host culture; or (b) they participate in a subcultural life that maintains their regular contact with a traditional system of beliefs about depression.
Kleinman and Good described culture as "the intersection of meaning and experience" (1985, p. 8). With its function being to assign meaning, culture is ever poised to provide explanation; in particular, to interpolate folk beliefs where scientific knowledge is spotty, highly tentative, unrelated to practical concerns, or altogether missing. In the public mind of the contemporary West, the restrained claims of science coexist with the unruly fecundity of cultural symbols and with cultural prescriptions for ritualized behavior. As a consequence, scientific ambiguity about depression exists in dynamic tension with the certainty which is offered by folk beliefs about depression.

Although individuals are wont to avail themselves of illness beliefs which predominate in their local cultures anyway, scientific ambiguity about depression provides them with added inducement to have recourse to so-called "native theories" and "naive beliefs" about depression. People readily adopt, and oftentimes aggressively acquire, unauthorized, i.e., nonscientific, subculturally transmitted accounts of depression. The scarcity of official information creates a press for cognitive fixity in a concept, like depression, which represents a deeply affecting yet universally shared experience. And practically speaking, individuals require an explanatory model to guide them in their
behavioral response to depression, especially when that involves a search for treatment.

The levelling effect of ambiguity in scientific cultures

The absence of a legitimated model of depression has additional significance in the developed countries of the West, where science and technology have become the ultimate arbiters of public beliefs. Without an officially promulgated model of depression, it is logically impossible for individuals in mass society to--either unwittingly or perversely--harbor or trade in "misbeliefs" about depression. That is, they cannot subscribe to propositions which are widely held to be false, such as, "The moon is made of blue cheese". Without this possibility of holding "incorrect" beliefs, all views of depression enjoy relative merit. Therefore, in technologically-driven Western societies, the combined universality of, and ambiguity about, depression has somewhat of a levelling effect. The explanatory power of popular and folk beliefs about depression are on more of an equal footing with the explanatory power of legitimated sources of knowledge about it than is true for other categories of major illness.
The impact of ambiguity on the scientific community

It is important to recognize that similar tensions, as those just described, arise in the scientific community as the result of ambiguity. As Coyne pointed out:

Increasingly, theoretical statements about the nature of depression start with an acknowledgment of its heterogeneity and the complexity and interdependence of causal factors now presumed to play a role in it. Yet beyond that, authors tend to lapse into a singular frame of reference that is predictable from their discipline and their indoctrination [emphasis added]. (1986, p. 19)

Cultural influences that routinely temporize the scientific enterprise thrive on residual ambiguity about depression. The absence of a significant body of consensually validated knowledge about depression opens the door for scientists and intellectuals to advance their "pet" theories. These favored accounts are the analog, in scientific circles, of folk beliefs about depression. In scholarly debates over the definition of depression, experts cannot agree with one another, yet are sure in recognizing the lustre of truth in their respective versions of the phenomenon.

Ambiguity and the scientific motive to define depression: A constructionist analysis

As Gergen (1985) described it, culture is imprinted on both the natural and social sciences in the constructions of reality that govern the thought and discourse of the scientific endeavor. According to Gergen, constructions are the product of intensively social processes and not, as is fre-
quently misapprehended, the raw product of objective, universal, and positivist epistemologies. Constructions exert a powerful hold over cognition because the fact of their constructed, or invented, nature tends to escape notice during their routine use.

In the scientific world, as was true of the pedestrian world, ambiguity encourages constructions to take root. Not only are fixed concepts needed to facilitate scientific activity, but there is commensurate need to take the culturogenesis of those constructs for granted. In the scientific world, constructions are lacquered with a quality of "seeming realness" that obscures their fundamental and ineradicable subjectivity. Ambiguity only seems to cause an even greater hardening in that process, making the invented origins of constructions quite opaque.

In science, the order of the day is to invent the truth when it is not disposed to manifest itself. Until such time as science produces a widely-accepted and uniform body of facts about depression, depression workers will continue to cherish preferred constructs about depression, conveniently forgetting that the mantle of verity in which those constructs are cloaked is a wholly invented one.

A Framework For Conceptualizing Beliefs About Depression: Kleinman's Ethnomedical Framework

The preceding discussion intended to illustrate how several distinctive characteristics of depression and some
cultural forces which interact with them contribute to a socially constructed concept of depression. In the paragraphs to follow, we will examine selections from the work of Arthur Kleinman (principally) in which the major objective is to reveal the full particulars underlying the social construction of illness experience, as well as its conceptualization.

Towards achieving that end, Kleinman, a psychiatrist and an anthropologist, developed a comprehensive framework of ethnomedicine for investigating and rendering sensible the multifarious events and relationships in health care systems (1980)49. In addition to general ethnomedical research and discursive writing, Kleinman has devoted his attention to the implications flowing from the specific intertwining of culture and depression, both on his own (e.g., 1977) and in collaboration with Good (1985). This interest in depression, coupled with his elaboration of an ethnomedical framework, makes Kleinman's work ideally suited for generating a richly based understanding of the manner

49 Kleinman defined the operational domain of ethnomedicine, the health care system, in this way: "In every culture, illness, the responses to it, individuals experiencing it and treating it, and the social institutions relating to it are all systematically interconnected. The totality of these interrelationships is the health care system. Put somewhat differently, the health care system, like other cultural systems, integrates the health-related components of society. These include patterns of belief about the causes of illness; norms governing choice and evaluation of treatment; socially-legitimated statuses, roles, power relationships, interaction settings, and institutions" (1980, p. 24).
and extent to which depressive illness experience is socially constructed.

Beliefs about Depression as Illness Beliefs

Kleinman explained that "unlike biomedicine, ethnomedicine would take the context of meaning within which sickness is labeled and experienced as its central analytic and comparative problem" (1980, p. 380). This preoccupation with meaning, leads Kleinman to focus rather intently on a cardinal source of illness meaning--illness beliefs. He describes them as "the central cognitive structure of every health care system" (1980, p. 90). By reason of the emphasis on illness beliefs implied by this definition, Kleinman’s ethnomedical framework holds paramount utility for the present study: it offers a fully rationalized perspective for conceptualizing beliefs about depression as illness beliefs.

Part of the immense value of an ethnomedical perspective is that, in conceptualizing beliefs about depression as illness beliefs, it conveys their power to shape the entire experience of depression from symptom formation to treatment outcome. Furthermore, the notion of illness beliefs about depression is consistent with the author’s approach to the assessment of beliefs in the BADIT. It is compatible with the assessment of beliefs as propositional elements, and Kleinman’s view that beliefs about the etiology of an illness and beliefs about treatments for that illness are
"closely tied" \(^{50}\) is directly supported by the author's attempt to assess both these kinds of beliefs about depression separately.

The foundation of ethnomedicine: The illness-disease distinction

As was mentioned earlier, the general ethnomedical framework is founded on a distinction between illness and disease. This distinction is the very basis of the ethnography of illnesses and has been delineated in a number of places (e.g., Fabrega, 1979; Reading, 1977) \(^{51}\). A brief acquaintance with this distinction will serve our understanding of the nature of illness beliefs about depression.

Here is the distinction as Kleinman put it:

A key axiom in medical anthropology is the dichotomy between two aspects of sickness: disease and illness. Disease refers to a malfunctioning of biological and/or psychological processes, while the term illness refers to the psychosocial experience and meaning of perceived disease. Viewed from this perspective, illness is the shaping of disease into behavior and experience. It is created by personal, social, and cultural reactions to disease. Constructing illness from disease [emphasis added] is a central function of health care systems (a coping function) and the first stage of healing. That is, illness contains responses to disease which attempt

\(^{50}\) "Thus, ideas about the cause of illness (as well as its pathophysiology and course) are linked to ideas about practical treatment interventions" (Kleinman, 1980, pp. 90-91). This view was substantiated by D'Andrade's field research on the cognitive structure of American illness beliefs (1976).

\(^{51}\) In his 1987 monograph on sickness, Brody cited 19 different sources in which this distinction was prominently discussed (p. 21, Note 2)!
to provide it with a meaningful form and explanation as well as control. (1980, p. 72)

Thus, through labeling and the other cognitive processes, symptoms are socially constructed...this critical activity--the shaping of symptoms--by which sickness is saturated with specific meaning and cast as a particular configuration of human action and thereby made into a special cultural form. That cultural form is illness....Illness is always more or less unique. At times we can talk securely about disease qua disease, but illness cannot be understood in that way: it can only be understood in a specific context of norms, symbolic meanings, and social interaction. (1980, p. 77)

Kleinman's prime dictum is that "culture shapes disease first by shaping our explanation of disease" (1977, p. 4). In this shaping process, an illness comes to incorporate what Conrad (1987) described as the social comprehension of a disease. In part, by bearing the social comprehension of disease, illness beliefs bear the explanatory function of culture.

In the passage to follow, Good and Kleinman take up the question of social comprehension when they consider the impact which the cultural meaning of a psychiatric disorder has on the experience of illness:

There is strong evidence to suggest that the cultural meaning of a disorder and the social evaluation of the disorder by members of the sufferer's primary social network have an important influence on the structure of the illness as a social reality and thereby on the course of the disorder and its effect on the life of the sufferer. The social response to the disorder, mediated by cultural explanations and interpretations, has an influence on the disorder which is independent of disease characteristics and etiological processes. An evaluation of the illness, in contrast to diagnosis of the disease, represents a characterization of the disorder from the perspective of the patient's primary social group (an 'emic' evaluation). In clinical settings in which the professional and popular categories and explanatory frameworks configure
psychopathology in quite similar fashion, the importance of the society's evaluation of the sufferer is hidden from view. (1985, pp. 502-503)

Illness meaning

Kleinman fortified his delineation of illness as a culturally determined mode of experience through conventional ethnographic concern with semiotics and semantic networks (1980)\textsuperscript{52}. In doing so, he put much store in illness meaning, a term denoting one of the forms by which individuals represent their experience of sickness to themselves\textsuperscript{53}.

In the following quote, which elaborates on illness meaning, Kleinman extends his disease-illness distinction, making the point that the experience of illness is continuous with the totality of a person's life space: "Illness is inseparable from the networks of meanings within which it is experienced and treated...illness absorbs and is saturated by the web of beliefs, norms, and interests that constitute the day-to-day world of the sick person in his particular social situation" (1981, p. 373).

\textsuperscript{52} For a particularly good example of this type of concern, see D'Andrade's efforts to reveal the workings of American illness beliefs by method of a formal semantic analysis of illness belief propositions (1976).

\textsuperscript{53} The term, illness meaning, may be something of conceptual overkill on Kleinman's part, given his heavy emphasis on culture's function in transforming disease into illness by virtue of its singular ability to impart meaning to it.
Two Major Dimensions of Kleinman's Work

The preceding excerpts from Kleinman's writing clearly expose two major dimensions of his work, both of which are worth bearing in mind.

First and foremost, Kleinman's discipline is an interpretive one. His project is to everywhere discern the universe of individuals' illness meanings. (It is one reason why emic assessments of sickness are so central to the ethnomedical framework.) Here, with abundant relevance to the present project, Kleinman and Good describe their use of interpretive analysis to study depression:

...dysphoric affect and depressive illness are investigated through a sustained analysis of systems of meaning and discourse. Sociolinguistics, cognitive psychology, semantic analysis, and phenomenological methods are each employed in turn to study how dysphoria is 'brought to meaning,' how specialized idioms and explanatory frames are used to interpret, articulate, and respond to depressive illness. (1985, p. 31)

The second dimension has to do with the philosophical roots of Kleinman’s work. Although not explicitly articulated as such, the ethnomedical framework appears to be firmly grounded in the assumptions of social constructionist inquiry. Gergen described this type of inquiry as being "principally concerned with explicating the processes by which people come to describe, explain, or otherwise account for the world (including themselves) in which they live" (1985, p. 266). Further, one of the core assumptions of social constructionist inquiry, as enunciated by Gergen, pro-
vides philosophical underpinning for Kleinman's thesis of the cultural derivation of illness from disease: "The terms in which the world is understood are social artifacts, products of historically situated interchanges among people" (p. 267).

Social constructionism is a doctrine not well reconciled with the limits of phenomenology. According to social constructionism, there is no true nature of things to be perceived or known, beyond the meanings we establish for them. Our thoughts are not reflections of the natural world, but are, in fact, constructions born of the world of human intercourse; with the character of that intercourse being governed chiefly by the transient, historically-bound conventions of language communities. Carried further, meaning is not immanent, i.e., does not reside in experience but is constructed from experience through the interpretive vehicle of culture.

Conceptualizing depression in light of social constructionism

There is an almost radical social constructionism which pervades Kleinman's ethnomedicine. It is unmistakable, for instance, in this critique of those who would approach psychiatric disorder as a knowable disease-object with a scientifically neutral existence:

...the traditional transcultural psychiatric preoccupation with disease as an entity, a thing to be 'discovered' in pure form under the layers of cultural camouflage....runs counter to our most developed
contemporary conceptions of disease, which argue that disease--be it biological or psychological--is an explanatory model not a thing....There can be no stripping away of layers of cultural accretion in order to isolate a culture-free entity. (1977, p. 4)

Even when one presumes that biological disease underlies depressive symptomatology, to understand the socially constructed nature of depression is to be aware that depression--the disease--cannot be known with any phenomenological immediacy. Depression, as a bald biological occurrence--such as in the defective metabolism of neurotransmitter fractions--cannot be experienced in human terms. Therefore, people do not have depression per se. What they "have" is a highly personalized image of depression, a chimera to which they give that name.

Kleinman and Good used these words to neatly sum up the relationship between the biology of depression and the experienced illness (perhaps) related to it: "There is no blood test for depression. If there were one, it would indicate some physiologic disorder, but not the fundamentally social illness we call depression" (1985, p. 4).

A fascinating and important implication of the inescapably social construction of depression is that, where there may be only one depressive disease, there are as many depressive illnesses as there are depressives. In the following passage, Good and Kleinman comment on some of the clinical ramifications of this:

...that a major depression is interpreted by one patient and his family in somatic terms (as neurasthenia, as undiagnosed medical illness) and by another in a religious idiom (as punishment of God for sins) may
turn out to have more implications for prognosis and treatment than the diagnosis major depression alone. (1985, p. 503)

Inadequate Attention to Illness Beliefs about Depression

Both the interpretive and social constructionist dimensions of Kleinman's work point up a serious inadequacy in the prevailing approach to the study of depression. From a clinical point of view, i.e., in terms of developing effective treatments, what has been missing in our current attempts to understand depression is a sound or systematically developed idea of what depression means to people in our culture.

Owing to the determinedly technological bent of Western societies, we have succeeded in developing (a) a relatively advanced level of appreciation of the possible, central neurochemical mechanisms responsible for certain debilitating symptoms of the depressive syndrome, and (b) sufficient psychometric expertise to identify a dysfunctional cognitive set which is typical of depression. What we do not have, however, is a catalog--so to speak--of illness beliefs related to depression.

54 This particular passage, though brief, is useful in highlighting the difference between the emic and etic approaches to the study of depression. The emic approach is ethnographic in character, and implies the interpretive notion of the existence of a myriad of idiosyncratically elaborated disorders. The etic approach, on the other hand, is epidemiological in character, and implies the taxonomical notion of the existence of but a single disorder, with several stipulated classes of subtypes.
That we have not assembled such a serviceable, reference collection of illness beliefs about depression undoubtedly reflects the lack of value we have placed on mainly nontechnological undertakings, such as the ethnography of depressive illness in the West. In consequence, our efforts to treat depression have been hobbled by restricted access to the realm of illness meanings of depression.

If, as previously considered, people can have the same biological disease of depression but very different depressive illnesses, then, treatment efficacy rests upon knowing something about the individual variants of depressive illness which afflict people. Being the font of illness meaning, illness beliefs offer the most logical basis for discriminating among depressive illnesses. On an operational level, in order to know about depressive illness in its individual variation, it is imperative to know what people believe about the causes of depression and its treatment.55

The Explanatory Model Construct

As was mentioned earlier, culture equips individuals with explanations of sickness in the form of illness beliefs, and from these explanations individuals derive a

55 This imperative embraces, precisely, the aim of the present study: to develop a valid and standardized means of sampling beliefs about depressive illness in a manner which would lend itself to the task of individualized treatment assignment.
large portion of what their illnesses mean to them. In his key monograph on ethnomedicine, *Patients and Healers in the Context of Culture* (1980), Kleinman introduced a construct called the *explanatory model* in order to fully represent the explanatory function of illness beliefs.

The explanatory model construct highlights the manner in which illness beliefs operate along with other factors in health care systems to guide instrumental responses to illness. It integrates all of the essential features of Kleinman’s proposed ethnomedical approach to illness, and as a result, it is comprehensive, pivotal, and applicable across cultures. Moreover, the construct provides a convenient way to think of the BADIT, the instrument developed by the author for the present study. The BADIT is a means of surveying an individuals’ explanatory models of depression—whether used in the context of basic ethnographic research or in the context of differential clinical assessment for treatment.

Because the explanatory model construct is of such clear-cut importance for the present study, an extended extract is offered here in order to properly convey Kleinman’s original intent in introducing it:

Explanatory models are the notions about an episode of sickness and its treatment that are employed by all those engaged in the clinical process....Explanatory models are held by patients and practitioners in all health care systems. They offer explanations of sickness and treatment to guide choices among available therapies and therapists and to cast personal and social meaning on the experience of sickness. (1980, p. 105)
Explanatory models need to be distinguished from general beliefs about sickness and health care....EMs [explanatory models], even though they draw upon these belief systems, are marshalled in response to particular illness episodes. (p. 106)

An explanatory model is partly conscious and partly outside of awareness. It is based on a cognitive system that directs reasoning along certain lines. Since EMs involve tacit knowledge, they are not coherent and unambiguous. In responding to an illness episode, individuals strain to integrate views in part idiosyncratic and in part acquired from the health ideology of the popular culture. (p. 107)

Finally, the degree of commitment to EMs varies among individuals. (p. 110)

The explanatory model:
Other terms, parallel concerns

A number of authors have introduced distinctive terms expressing the same or similar concerns as Kleinman's concern with the part that illness meaning plays in shaping illness behavior and treatment response.

Outside the study of depression, for example, Houts (1984) used the term "explanatory bias" to represent an important process variable having to do with basic problem definition within the psychotherapist-client dyad. Also, approaching health and illness from a traditional sociological perspective, Leventhal, Safer, and Panagis (1983) used the term "illness representation" in a fairly straightforward manner to indicate the way individuals conceptualize their health problems.

Within the depression literature, Cane and Gotlib wrote an article (1985) on social cognition about depression which incorporated two terms that run parallel to the explanatory
model construct. One, adopted from formal cognitive theory, is a "(consensual) prototype for depression", which relates to the way that social knowledge about depression is structured. The other, "implicit conceptualization", refers to the way in which some of the contents of an explanatory model of depression are represented at a less-than-conscious level of cognitive organization.

Also within the depression literature, Rippere produced a substantial body of work (e.g., 1976, 1977c, 1980e, 1981a) which revolved around the notion of a "cultural template" of commonsense beliefs about depression--a notion addressing just one attribute of explanatory models.56

Although others have alluded to the functional existence of something like an explanatory model, it is important to keep in mind that Kleinman’s explanatory model construct is unique in having been elaborated within a fully developed system of concepts which constitute a model of the health care system.

Parallel Methods: Enhancing the Appreciation of Illness Meaning

In addition to the several different investigators who have introduced their own concepts which parallel the explanatory model construct, a number of authors have employed methods of study which roughly parallel those used by

56 These works from the depression literature will be reviewed in detail in the latter portion of this section.
Kleinman. That is, they rely on interpretive analyses to gain insight into the broad cultural meanings that attach to specific forms of sickness. These writers are absorbed with the social comprehension of disease. In this respect, they share Kleinman’s concern with the impact which culturally mediated illness meanings have on both public behavior and the illness behavior of individual sufferers. The method employed by these writers, however, contrasts with Kleinman’s approach to interpretive analysis.

This other group of writers takes an intensely hermeneutic approach to the project of "reading" culture, one devoted to deciphering the meaning of illness at the level of social metaphor. Kleinman’s approach to cultural analysis, on the other hand, is an explicitly clinical enterprise. It is interpretive in so far as culture—the ubiquitous context of illness—demands that it be. The application of Kleinman’s ethnomedical discipline, therefore, does not usually generate well-developed explications of the cultural significance of given disorders, as is the case with the work of the more expressly hermeneutic social analysts.

Sontag’s 1977 study comparing the social psychological implications of tuberculosis in the previous century to cancer in this one, exemplifies the hermeneutic genre. Two additional examples having acute contemporary relevance are Conrad’s essay on the social reaction to AIDS (1986), and Shenson’s attempt to perceive the public image of that dis-
ease as refracted through his clinical experiences treating patients with leprosy at the U. S. Public Health Service’s Hansen’s Disease Center (1988).

Of pointed relevance to the present study, Hazleton undertook to pursue similar objectives of analysis in her treatise on the social and cultural significance of depression, The Right To Feel Bad (1984). Although this work is more devoted to presenting accessible discussions of scientific and medical aspects of illness (depression) than is typical of Sontag’s work, Hazleton’s writing seems dominated by a similar hermeneutic purpose: to elucidate the web of interdependent personal and social meanings which illness inspires.

In addition to Hazleton’s study of depression, several authors (e.g., Anthony & Benedek, 1975; Gaylin, 1968/1983) have engaged in probing contemplations of the meaningfulness of depression—considered from individual and social perspectives—without employing broad interpretive analyses to do so.

These hermeneutic studies of depression are a needed complement to the study of explanatory models (illness beliefs). They provide us with a sense of the richness of the social significance and some of the personal significance which depression holds for people. Even though these sources of illness meaning are partially represented in the content of illness beliefs, hermeneutic analyses have the
power to take us beyond an understanding of the meaning of depression based solely on propositional beliefs.

Illness and Disease in Relation to Belief Orientation

With the presentation of Kleinman's ethnomedical framework completed, this is a good juncture at which to note how the illness-disease distinction—so central to that framework—relates to the belief orientations upon which the author's measure of illness beliefs about depression, the BADIT, is based.

Conceptualizing depression as a disease is fundamental to a biomedical belief orientation. Perhaps the most outright and well-established example of such conceptualizing is witnessed in the bioamine hypothesis of affective disorders. Rendered here in somewhat oversimplified terms, the bioamine hypothesis defines all of the great variety of depressive complaints and presentations as epiphenomenal to a disease process which affects centrally active neurotransmitters and neuroregulators.

In this kind of biomedical view, subjective illness meanings are not regarded as imbuing individual depressive experience with unique ontological character. Rather, they are tolerated as part of the phenomenological clutter which practitioners must contend with in addressing the clinical reality of depressive illness.
By contrast, conceptualizing depression as an illness is intrinsically congenial to, if not fundamental to, a psychosocial belief orientation. Psychosocial views of depression arise from some of the same conceptual ground as does the ethnomedical framework. Illness, not disease, is the preferred way of approaching the understanding of sickness. Brown’s model of the social origins of depression in British women (Brown & Harris, 1978) offers a coherent example of the psychosocial viewpoint.

It is important to realize, however, that psychosocial belief orientations are also able to accommodate views in which depression is quite unequivocally conceptualized as a disease. The prime example of this is Beck’s cognitive model of depression (1967), in which depression is unmistakably described as a psychological disease without any reference to the culturally constructed nature of depressive symptomatology.

The Utility of Kleinman’s Ethnomedical Framework

To conclude this examination of Kleinman’s work, it will be helpful to enumerate several outstanding features of his ethnomedical framework which make it of particularly great utility to the present study.

First, the framework is sweeping in terms of the scope of phenomena it addresses within its domain of the health

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57 Described on p. 14, this dissertation.
care system; yet, it has also been specifically honed for considering the case of depression (1977; Kleinman & Good, 1985). Second, the language of Kleinman’s ethnomedicine—including concepts like illness meaning, illness beliefs, explanatory model—establishes a perspective which brings the exact center of the present study of beliefs about depression into sharp focus. Third, the framework provides the present inquiry with a fully developed conceptual foundation with which to assimilate others’ work on beliefs about depression. In particular, with regard to the last point, the framework is invaluable in gaining a sense of the differing but complementary nature of the monumental contribution made to this area by British psychologist, Vicki Rippere, whose work will be taken up next.

Rippere’s Field Studies Of Depression-relevant Cognition

Rippere’s work approximates Kleinman’s in several key respects. To begin with, Rippere shares with Kleinman a fundamental appreciation of the "socially constructed nature of depression" (Rippere, 1981b, p. 177). Secondly, even though her work is probably best classified—strictly speaking—under the rubric of social cognition, it is informed by an unmistakable anthropological sensibility. That sensibility is reflected in a primary, three-fold interest in the cultural rendering of the experience of depression: (1) an interest in the formative effect of culture on every-
day, commonsense cognition about depression and the immediate impact of that cognition on antidepressive behavior, (2) an interest in the historical continuity of that cultural influence, and (3) an interest in culture as the vehicle of ultimate, psychosocial evolutionary purposes (1981a).

Rippere’s View Of Culture

In contrast to Kleinman, Rippere’s interest in culture is implicitly defined by a cognitive, social interactionist perspective. The dominant focus in her work is on the cognitive processes which undergird the web of social relations engendered by culture. Rippere represents culture in several modes, but she represents it most conspicuously as the medium of a "complex network of shared knowledge" (1981b, p. 176).

Several other foci of interest in culture are reflected in her work, as well. For instance, the cultural heritage of the network of socially shared knowledge, cited above, receives significant emphasis in Rippere’s writing. As a consequence of this emphasis, culture is a referent for both an historical process and the corpus of knowledge which results from that process.

The flow of culture is regarded as producing a residuum of collective experience that is the source of the shared

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58 The cognitive, social interactionist position receives an explicit treatment in a 1985 article by two of its adherents, Cane and Gotlib. The article is described below, beginning on p. 205 of this manuscript.
knowledge which is particular to each society. Rippere mem-
orably characterized the unceasing and directly shaping ef-
flect that the historical tide of culture has on the corpus
of socially shared knowledge, when she referred to the
traces that culture leaves on "the cognitive palimpsest of
every day life" (1980d, p. 383).

Rippere’s concentration on the theme of socially shared
knowledge is augmented by her focus on another, and perhaps
more critical, mode of culture. It is the sense in which
culture is a social process expressing evolutionary teleol-
ogy. Rippere’s conception of shared knowledge networks im-
plies that they work to ensure nothing less than the genetic
success of the species. By serving the basic, meaning-giv-
ing purposes of culture, the sharing of commonsense knowl-
edge is held to facilitate sufficient harmony in the social
order to secure conditions favorable to both reproduction
and continued survival.

Rippere’s keen attention to culture as social process
emphasizes the vitality of culture; for this vitality and
the transactive dynamism it generates are what make communal
cognitive networks possible.

Another defining characteristic of Rippere’s view of
culture stems from the delineation of her interest in cul-
ture as an interest in "the world of everyday life" (1981a). In
keeping with the arena of the everyday, Rippere’s work is
intensively focused on everyday cognition, or commonsense
knowledge.
It should be added that while this focus is a distinctive feature of Rippere’s work, it is by no means unique. For example, Gillick (1985) outlined the recent history and status of more than a few, popular and "common-sense" models of health and disease which operate in American culture. What is, perhaps, unique is Rippere’s ardent commitment to the study of the everyday world and the commonsense cognition that is part of it. That commitment will be evident in the ensuing discussion of her work.

The Nature and Extent Of Rippere’s Work on Depression

Rippere brings the several aspects of her view of culture to bear on the question of depression in order to explicate the robust consensuality and surprising complexity which she discovered to be intrinsic aspects of what ordinary British people commonly "know" (believe) about depression. Examination of the social and clinical implications of the consensuality and complexity of commonsense, everyday knowledge about depression comprises the core of her project.

Rippere characterized her work on depression as "exploratory, tentative, heuristic and descriptive" (1981b); a characterization which must be considered either modest or ironic in light of the true heft of the work.

The backbone of Rippere’s contribution to this area is empirical, involving a thoughtfully programmatic sequence of
field studies. Soundly motivated by theory, the research also indicates keen attention to methodological concerns. Overall, Rippere’s body of work possesses an unusual degree of depth owing to the following: (a) it is grounded in Rippere’s original historical research (e.g., 1980a), (b) it is fertilized with adroit borrowings from a wide range of social science and clinical literatures, and (c) it is articulated with philosophical acuity.

The published opus⁵⁹, which appeared within a nine-year span, is comprised of: 13 research reports, for 11 of which Rippere is the sole author (1976, 1977a-b, 1977d, 1979, 1980b-f, 1981b); three essays (1977c, 1980a—a book chapter, 1981a); and, co-editorship of a related book (Rippere & Williams, 1985). The empirical research project, which included two cross-cultural (Spanish/Iberian) replication studies (Caro, Miralles, & Rippere, 1983; Miralles, Caro, & Rippere, 1983), utilized nine separate and original assessment questionnaires⁶⁰ to collect data from a total of 685 different subjects, comprising 24 independent samples.

⁵⁹ This excludes her unpublished, 1974, M. Phil. dissertation from the University of London, entitled "Antidepressive Behaviour".

⁶⁰ 1) "Antidepressive Activity Questionnaire", (1976);
  2) untitled, (1977a), similar to #6 below;
  3) "Beliefs About Behaviour", (1977d);
  4) "Helpfulness of Antidepressive Activities Questionnaire", (1979);
  5) "Views About Depression Questionnaire", (1980b);
  6) "Experience of Depression Questionnaire", (1980d);
  7) "Factors in Depression", (1980e);
  8) "Views on Depression", (1980f);
  9) "Exacerbation of Depression Questionnaire", (1981b).
Rippere's work proceeds from a strong, broad critique of mainstream empiricism, which she described as a psychology dominated by "an ideology of prediction and control" (1980e, p. 562). This criticism carries over to the prevailing approach to understanding depression. She argued that, as an approach, it fails to achieve a "truly adequate psychology of human depression" because it lacks "adequate appreciation of the commonplace, traditional, culturally-transmitted, rule-following, and adaptive character of ADB [antidepressive behavior]" (1976, pp. 289-290).

Discovering a "total silence on the matter of what ordinary people ordinarily think and do about depression which reigns in the professional literature" (1977d, p. 467), Rippere offered her own, essentially descriptive, research program as a corrective to that "curious scotoma in the vision of contemporary clinical researchers" (1976, p. 290). Her aim was to investigate depression-relevant versus depression-dependent cognition in order to delineate a psy-

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61 In numerous places, Rippere has presented comprehensive and forceful critical analyses of a similar kind—see, for example, the opening section of a 1977 article on some cognitive dimensions of antidepressive behavior (1977a). In a separate article, which also appeared in 1977, Rippere put her criticism this way: "The fact that in addition to feeling depressed and perhaps having depressively-tinged cognitions (Beck, 1971), people may have socially-learned normative ideas about depression and what someone may do about it when feeling that way, has by and large evaded the notice of psychological investigators" (1977b, p. 185). These views coincide almost exactly with the critical view expressed in the author's discussion of the restriction in the 'cognitive paradigm' (cf pp. 20-24 this dissertation).
The psychology of depression that could prove "maximally relevant to ordinary people" (1977b, p. 185).

The social sharing of recipe knowledge about depression

The keystone of Rippere's theoretical framework for a human psychology of depression is the concept of a "social stock of knowledge". Initially articulated by Berger and Luckman in The Social Construction of Reality (1967), Rippere used the concept as a stand-in for her more general idea of the wide sharing of knowledge made possible by culture. This use is made clear from her definition of the term as "the fund of objectified and accumulated experience in a society that is transmitted, often in lapidary formulations, from one generation to the next so that it is available to the individual in defining and attempting to solve the problems he encounters in everyday life" (1976, p. 290).

A basic premise in the structure of Rippere's overall argument is that commonsense knowledge (lay beliefs) about depression is ingrained in the social stock of knowledge which circulates in a given culture. It should be noted that Rippere's interest in the seminal role of 'the social stock of knowledge' was actually limited to an investigation of its place in English-speaking culture. 62

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62 With the obvious exception of her cross-cultural samples, all of Rippere's research samples were nominally British. Nevertheless, when identifying the ethnic purview of her work, she uses the broader rubric of 'English-speaking cul-
Rippere makes heavy use of another concept drawn from Berger and Luckman's work on the sociology of knowledge, a concept derived from 'the social stock of knowledge' concept. It is the notion of "recipe knowledge", which is that aspect of the social stock of knowledge that supplies individuals with ready-made procedures--or what Rippere called "behavioural recipes" (1977b)--for coping with the kinds of problems they are likely to encounter in their culture.

In the following passage, Rippere enlarges on the function of recipe knowledge in light of the problem of depression: "... in our Western, urban English-speaking culture, at least, where most present-day research on depression is conducted, 'feeling depressed' is precisely one of the typical events, the 'familiar problems', that their socialization prepares people for encountering, and their socially shared knowledge includes a repertoire of contingency plans, a set of recipes for 'what to do' in case this common problem [of depression] should arise" (1977b, p. 185).

In differentiating 'recipe knowledge' from other kinds of commonsense beliefs about depression which are part of the social stock of knowledge, Rippere underscored the idea that where people have beliefs about illness, those beliefs are sure to be coupled with beliefs about the treatment of that illness. The same idea can be found in Kleinman's general observations about illness beliefs (1980); observations...
borne out by D’Andrade’s empirical study of the cognitive structure of illness beliefs in American culture (1976).

In addition to this congruence, Rippere’s interest in varieties of commonsense knowledge about depression makes her approach conducive to being recast along the lines of Kleinman’s explanatory model construct. In fact, Kleinman had gone so far as to indicate that the explanatory models applied by practitioners "might be regarded as a special type of the 'commonsense' rationality found in the popular culture" [emphasis added] (1980, p. 10).

Furthermore, it may be helpful to see Rippere’s empirical research program as an effort to specify a number of key constituents in a general, meta-explanatory model of depression to which English-speaking people refer in their everyday life. Before moving on to an enumeration of those constituents, it will be useful to gain a fuller sense of Rippere’s overall conceptual framework by examining the elements of her core thesis.

The core thesis

In "Depression, Common Sense, and Psychosocial Evolution" (1981a), Rippere provides the most expressly theoretical statement for her undertaking. In it, she postulates the culturogenesis of, what Kleinman would call, individuals’ explanatory models of depression. She does this by first identifying, in the following passage, the basis for what is the uniquely human aspect of depression:
the experience of depression in members of those human societies which have a category of 'depression' or its equivalent would have two principal components: ...biologically wired-in propensities and...the socioculturally transmitted schemas for construing and expressing their experience in all its ramifications that differentiate humans from lower species lacking symbolic language and culture. (1981a, p. 381)

She qualifies her view of the interpretive, sociocultural component in depressive experience, however, by positing a social process of cognitive mediation:

ideas on these matters [of depression] do not arise from experience only; rather than arising immediately, they are mediated....What mediates between people's experiences of depression and their ideas about depressive experience is a complex network of socially transmitted schemas that for historical reasons have become characteristic of our Western English-speaking culture. (1981a, p. 381)

In an earlier work (1980e), Rippere expanded on the "historical reasons" that a particular network of socially transmitted schemas about depression have become a fixture of the social stock of knowledge in English-speaking culture. Her commentary on this began by tracing the source of those reasons to a single historical development:

This development was William Caxton's introduction of the printing press into England in 1477. Within the span of less than 50 years, the Graeco-Roman heritage of advice on the nature and treatment of melancholic disorders had begun a new phase of its history, as the traditional materials were translated into the English vernacular and disseminated further in forms that were gradually adapted to conform to the different circumstances of the Christian, post-medieval receiving culture. The ideas that had hitherto been available only in ancient and foreign languages rapidly became the basis of popular vernacular literary and medical tradition. This fund of received neoclassical ideas also provided a ready-made foundation for the development of an English-language social stock of knowledge about depression, its prevention and appropriate management. (1980e, p. 374)
Taken together, the foregoing steps in Rippere's line of thought culminate in an expectation of substantial commonality in people's explanatory models of depression:

Psychologically, the broad similarity in people's views about depression and antidepressive behaviour would arise from their common exposure to the same corpus of socially shared and transmitted schemas circulating in the social stock of knowledge or pool of common culture. (1981a, p. 382)

The Empirical Research Program

Scope

As was previously indicated, the heart of Rippere's project was an empirical research program to establish some of the specific content of the corpus of socially shared schemas about depression characteristic of British culture. Seen as an extension of Kleinman's work, the heart of the project was to delineate some of the specific content of a general explanatory model of depression, applicable to the experience of English-speaking people.

63 This is something of a contradiction because Kleinman strongly held that explanatory models are not general but particular in nature; not only particular to individuals and particular illnesses, but to particular episodes of illness as well (1980, p. 106--quoted on p. 156 of this manuscript). The author believes, however, that there is sufficient heuristic value to warrant an extension of Kleinman's construct. Especially because, when extended to represent the notion of a general or meta-explanatory model of depression, the construct preserves Rippere's idea that beliefs about depression are culturally transmitted as a uniform epistemic template (Rippere, 1980b, p. 85). The uniform template is received whole and constitutes the foundation of the cognition that--in light of experience and local culture--is subsequently differentiated into a particular and individual explanatory model of depression.
Essentially, the field research was conducted to determine people's beliefs about four basic matters related to depression: (1) how prevalent and clinically extensive depression is; (2) what causes depression; (3) what exacerbates an existing depressive state; and, (4) what is helpful in treating depression.

With regard to the last topic of inquiry, it is useful to keep in mind that, in Rippere's idiom, treatment is classified as 'antidepressive behavior'. It is a category which reflects her intense interest in the phenomena of everyday life, in which the lion's share of treatment for depression is understood to be informally organized according to the principle of self-care.

Methods

Rippere used a variety of methods to gather information on the four basic areas of depression-relevant cognition. In a handful of studies, Rippere recruited public samples of convenience (unpaid volunteers), and presented them with open-ended questions such as "What's the thing to do when you're feeling depressed?" (Caro, Miralles, & Rippere, 1983; Rippere, 1976, 1977b), or "When you're feeling depressed, what sorts of things can make you feel worse?" (Miralles, Caro, & Rippere, 1983; Rippere, 1980c).

For the balance of her studies, with the exception of a 1976 study, Rippere used available samples constituted from naturally occurring groups. Those groups consisted mainly
of mental health professionals, psychologists, and psychology students (graduate and undergraduate level) who, typically, were attending lectures on depression or depression research. The exception, the 1976 study, is noteworthy for being the only occasion on which Rippere used patient groups—a total of four—two of which were comprised of clinically depressed patients (inpatient and outpatient).

For the major portion of the studies, Rippere collected data on beliefs about depression with a number of different questionnaires (see list in footnote #60, p. 166 this manuscript). The questionnaires employed an assortment of response formats: short answer, forced choice (pairs, and true-false), interval scale, likert-type agreement scale, etc. In an attempt to convey some of the differences in the content and formatting of these questionnaires, a few examples will be provided.

Sample questionnaire items

The first example is taken from a 20-item, forced-choice instrument entitled "Beliefs About Behaviour" which "was assembled on an inductive basis to cover a range of content areas, including commonsensical descriptions of and prescriptions for antidepressive behaviour, semantic distinctions, judgments about usual or relative efficacy of various courses of action, and also, for contrast, a number of generalizations related to recent empirical findings...and theoretical positions..." (1977d, p. 469).
Respondents were asked to endorse one of a pair of "propositions" about depression in these two sample items:

7a) When someone is feeling depressed, he ought to try to deal with it himself rather than consulting a psychiatrist.
7b) When someone is feeling depressed, he ought to consult a psychiatrist rather than trying to deal with it himself.

16a) People get depressed when they lose control over important things that happen to them.
16b) People get depressed when they realize their plans aren't going to work out as they had hoped.

(1977d, p. 470).

The second example is taken from a 10-item, forced-choice instrument entitled "Views About Depression Questionnaire". It also made use of paired propositions for which respondents were to indicate "which of the two is more nearly the truth as far as you are concerned" (1980b, pp. 80-81). The sample item appears to tap into beliefs about the subjective phenomenology of depressive experience:

6a) 'Feeling depressed' is not the same as 'feeling depressed about something.'
6b) 'Feeling depressed' is no different from 'feeling depressed about something.'

(1980b, p. 81).

A third example is taken from a collection of 15 "propositions derived from the historical canon of beliefs about spiritual consolation in depression" (1980f, p. 551). The same set of items was presented in two different response formats and administered to two independent samples.
One format was an interval scale measuring extent of agreement and the other was a true-false forced-choice format. In both formats, the items were presented on a questionnaire which was entitled "Views on Depression"; the sample item is #11:

Inducing sudden fright or anger can often help jolt a person out of depression.

(1980f, p. 552).

A final example, taken from an untitled questionnaire consisting of six short answer questions and one open-ended question (1977a), displays still another approach to data collection used by Rippere. Each of the short answer questions was immediately followed by a 5-point frequency scale with anchor points ranging from "Never" to "Always". The sample item, below, was the fifth question:

When (s)he is feeling depressed, how often do you think the average person tries to do something about it?

(1977a, p. 58).

Rippere's Findings (I.)

Rippere's research yielded three principal findings. First, she empirically established "a set of discursive propositions which would constitute a first approximation to at least some of the contents of the social stock of knowledge regarding depression and antidepressive behaviour" (1980b, p.79). This was the major substantive achievement of the research program.
Second, as a direct result of identifying some of the content of the culturally transmitted (British) template for depression, Rippere demonstrated that commonsense beliefs about depression were greatly shared by the members of her British samples.

Third, she showed that "several orders of logical complexity" (1980e, p. 373) were present in the array of propositions represented in her subjects' beliefs about depression.

The latter two findings, i.e., of cognitive dimensions in the beliefs about depression held commonly by Britons, will be discussed below.

Consensuality and complexity

The manifest consensuality in her subject's views of depression prompted Rippere to ask "to what extent does people's knowledge of depression and antidepressive behaviour extend beyond their own personal beliefs to an awareness of the degree to which their own beliefs are shared?" (1980b, p. 79). This question was explored through repeated implementation of a basic study paradigm. Subjects, all of whom were members of naturally occurring groups, were presented with a series of double rating tasks. They were asked first about either their own everyday experiences with depression or about some aspect of their depression-related cognition. Then, they were asked to estimate their group's response (i.e., the group mean) to the same questions. Rippere found
that her subjects were able to predict the pattern of their group's responses "with remarkable accuracy" (1980f, p. 549).

After initial studies indicated a dimension of consensuality in people's beliefs, Rippere introduced methods to investigate whether her subjects were capable of estimating others' experiences with, and views about depression, with greater numerical precision. At first (1979), she applied direct interval scaling to the basic rating task. Then, in a later, more intensive study (1980b), subjects were asked to estimate the frequency distribution of different views on depression within their group by reporting the proportion of their groupmates whom they believed had endorsed a given questionnaire item. The accuracy of subjects' predictions of their group's responses on these tasks revealed that, in addition to the previously established qualitative dimension, there was a quantitative dimension in individuals' depression-relevant cognition. Rippere concluded that "...people seem to know not only 'what everyone knows' [about depression] but also the extent to which 'everyone' knows it..." (1980b, p. 85).

Rippere: "The observed findings are compared with the average of the group's estimates and their similarity is gauged either by means of a visual inspection or the aid of Spearman rank order correlations. Correlations of the order of +0.9 have been found and, when the same study is replicated in another group or groups, the correlations for the different groups have generally been of the same order of magnitude" (1981a, p. 380).
Epistemological complexity of the culturally transmitted template

The kind of knowledge about depression which individuals manipulate in attempting to both make sense of depression and cope with it as an immediate experience, Rippere called "first-order" cognition (e.g., 1977a). It is egocentric in reference and different from the kind of cognition involved in knowing "what everyone knows" about depression. This latter knowledge which Rippere labeled "higher-order" cognition is distinctly social in its reference.

Through her studies, Rippere found socially referenced cognition about depression to have an unmistakably quantitative aspect. This documentation of a quantitative aspect of higher-order cognition about depression provided another indication that the everyday knowledge about depression which is shared throughout a culture is a complexly ordered phenomenon having several dimensions of cognitive organization.

Rippere discovered that her subjects' sharing of knowledge not based on personal experience (higher-order) was quite extensive. They demonstrated knowledge not only of their cultural peers' experience of depression, but "fairly accurate" (1980d, p. 263) knowledge of their peers' views about depression, as well. In fact, Rippere ascertained that her subjects' sharing of knowledge approached the highest order of complexity, extending to the "further realms of other people's ideas about the hypothetical average person's depressive experience" (p. 263).
Moreover, the complexity of the culturally transmitted template for depression was strikingly evident in subjects' repeated ability, across numerous independent samples and a variety of tasks, to predict group views independently from the views they offered as their own (1981a, p. 380). In making their ratings, it was clear that subjects had accessed separate categories of knowledge about depression.

Finally, the actual content of subjects' predictions of their group's responses were impressively similar across groups. This helped to make apparent the contingent relationship between the dimensions of complexity and consensuality in the domain of depression-relevant cognition. Rippere clarified the interrelatedness of these dimensions in the following manner:

Thus it is probably fair to say that with regard to at least certain socially salient topics [like depression], people share not one but two sets of beliefs. At the first level are their own personal, substantive views on a subject,... which are not necessarily consensual for any particular individual, since it is possible for someone to endorse a minority view. At the second level is their--normally--consensual view about the relative frequency with which these positions are held by others in the social milieu. Not everyone need share the view of the majority but most would share the common knowledge of what view it is that the majority shares [emphasis added]. (1980e, p. 380)

Research Findings (II.)

In a 1981 article, Rippere summarized her main findings with a list of "topics", presented below, about which her
research subjects had "been found to have both first- and higher-order views":

(1) how often they, and the 'average person', tend to feel depressed; [1977a, 1980d]

(2) when feeling depressed, how often they, and the 'average person', tend to try to do something about it; [1977a]

(3) how often they, and the 'average person', find that what they do about it works; [1977a]

(4) how depressed they, and the 'average person', usually feel when feeling depressed; [1980d]

(5) for how long they, and the 'average person', tend to go on feeling depressed once they start; [1980d]

(6) how helpful they, and the 'average person', tend to find certain typical antidepressive activities when they are feeling depressed; [1979]

(7) how much worse certain typical events are likely to make them, and their peers, feel when they're already feeling depressed; [1980c]

(8) how true or otherwise they and their peers find certain discursive propositions about various aspects of depression, its self-management, and prevention. [1977a, 1980b, 1980d]

(1981a, p. 380).

The historical descent of the neoclassical canon

Although comprehensive, the preceding summary fails to list a finding of some considerable importance to Rippere's work. It is the general finding that authoritative views about depression which were disseminated in the English-

\[65\] In the brackets, reference dates are provided for the paper(s) in which the listed finding originally appeared.
speaking world of the 16th century appear to have currency in contemporary beliefs about depression and its treatment. A majority of the subjects in one of Rippere's studies (1980e) agreed with 8 out of 10 propositions derived from what Rippere identified as the neoclassical tradition of advice on melancholy. This result supported one of Rippere's core hypotheses that the British social stock of knowledge concerning depression is, in large part, historically descended from "orthodox medical wisdom" (1980f, p. 550) which appeared in some of the first printed English texts. Additionally, a review of relevant clinical literature on depression suggested to Rippere that there is "a considerable degree of continuity between the neoclassical canon of spiritual consolation for the depressed and parts of the contemporary cognitive psychology of depression" (1980f, p. 561).

Rippere argued that the resurgent popularity of the neoclassical canon of propositions about depression reflected in contemporary psychological writing represented "not merely the reemergence of a few isolated ideas but rather a discovery of the Ancients' paradigm itself" (1980f, p. 561). She held that this discovery is in keeping with a

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66 The subjects comprised three groups: \( n = 13; n = 15; n = 36 \).
general scientific and practical revival of ancient ideas currently taking place\textsuperscript{67}.

On the other hand, Rippere attributed the prominence of "ancient" ideas among the commonsense beliefs about depression to which the lay public now subscribes to historical persistence, not to discovery. In the following passage, Rippere explains the robust persistence of ancient dicta on melancholy in terms of their pragmatic validity:

One very likely explanation for their continuous survival would seem to be that many of them were in the first instance derived inductively from empirical observation rather than deductively from theory and that, since they pertain to highly salient and readily accessible aspects of daily life, it is open to anyone to repeat and confirm the observation in his own daily experience, both at first and second hand. (1980\textsuperscript{e}, p. 381).

The social meaning of depression-relevant cognition

From a broad cognitive perspective, one can say that the chief effect of Rippere's work was to demonstrate that "in those human societies which have a category of 'depression' or its equivalent" (1981, p. 381), 'depression' constitutes a coherent, differentiated category of knowledge.\textsuperscript{68} What is more, Rippere was able to convincingly

\textsuperscript{67} A revival she described as "something of a miniature Renaissance" (1980\textsuperscript{f}, p. 561).

\textsuperscript{68} Anthropologists have long recognized that illnesses are cognitive hubs for the proliferation of terms and concepts, and they have traditionally investigated them as important interpretive pathways of culture. It is not surprising to note, therefore, that the understanding of depression, pro-
show that, in British life, the culturally transmitted template for depression is significantly characterized by knowledge with an explicitly social reference.

In seeking the possible purpose underlying the decidedly social nature of British commonsense knowledge about depression, the evolutionary teleology which motivates Rippere's entire body of theory comes to the fore. Using the term "schemas" to refer to depression-relevant cognition and the term "meta-map" to refer to higher-order schemas, i.e. schemas with a social reference, Rippere expounded on the ultimate purposes of a socially shared stock of everyday knowledge about depression:

Where the first-order schemas enable individuals to define in socially sanctioned ways the nature of their experience and approaches to dealing with its problematic aspects, their higher-order schemas give them a socially shared grid of cognitive coordinates upon which they can situate themselves and others both in relation to social norms and in relation to each other. (1981a, p. 384)

But whereas the recipes in the first-order social stock of knowledge facilitate people's survival in the face of the rigours of life on our inhospitable planet, their meta-maps facilitate the survival of social life in human society. (p. 385)

Appraisal

Before moving on, to consider some other studies of depression-relevant cognition, it will be useful to evaluate Rippere's work, especially in relation to the present psychometric endeavor to assess beliefs about depression. 

Motivated by Rippere's work, is reproduced in Kleinman's study of semantic illness networks associated with depression.
Rippere produced a large, varied, and carefully developed body of work, unusual for its equal theoretical and empirical strengths. Attempting to reduce it to several evaluative statements does it an injustice. Nevertheless, it is fair to say that the prime significance of Rippere's work for the present project is that it is the only research currently available that is near to being an ethnography of depression in a modern, post-industrial society. As such, the work has extraordinary importance for having approached depression from the point of view of illness beliefs, and from having documented some of the cognitive domain associated with depression. Of immediate and concrete moment, however, is the fact that Rippere is the sole investigator to have actually undertaken the (comprehensive) measurement of beliefs about depression and its treatment.

Rippere's work has a relevance to the author's project which goes a good deal beyond the practical effort to measure beliefs about depression, however. Some of that relevance is conceptual in nature, some of it empirical, and some, even, polemical. Each of these areas of relevance will be examined in turn.

The polemical

Throughout her writing, Rippere presents a detailed and searching critique of the reigning conventions in depression research (e.g., 1976, 1977a, 1977b, 1977d). Rippere's criticisms run in the same direction as those voiced by the
author, but because of the greater breadth of her work, her arguments go much further than the author's.

Rippere brought the subject of beliefs about depression out of the dark. She did this not only by identifying the neglect and depreciation to which lay, or commonsense, cognition is subjected by contemporary depression researchers, but by highlighting the integral value of the "normative and adaptive" cognitions about depression which are held by members of society, whether they are depressed or not (1977a, p. 57).

Rippere's emphasis on the relationship of cognitive schema to indigenous antidepressive response was the point of, perhaps, greatest relevance to the author's project. With estimable polemical skill, Rippere attempted to show how continued and pervasive professional and scientific ignorance about what ordinary people believe and do about depression is borne at great cost.

She called attention, for example, to the fact that therapists who ignore their patients' cognitive resources for the effective self-management of depression tend to intervene in ways which carry a defeating implication of their patients' helplessness (1979, pp. 445-447). The point was thus effectively made that indigenous (cognitive) antidepressive resources can only be ignored, or devalued at the risk of badly undermining self-help and its special esteem-building consequences.
Although Rippere's concern was with the broad domain of depression-related cognition, she customarily made use of the term 'knowledge'. The full compass of her writing makes clear, however, that she used the term to represent the concept of belief, in the sense that knowledge is that which someone believes to be true. This interchangeable use of cognitive terms, though potentially misleading, is quite typical of this general area of literature.

A true indication of Rippere's semantic intent is manifest in her efforts to assess depression-relevant cognition. A major feature of Rippere's work with positive relation to the author's project is that she approached beliefs about depression as propositional elements—a conceptualization coinciding with the author's approach to the assessment of beliefs. Rippere's methodology for assessing beliefs and the author's are both based on measuring the extent of a respondent's agreement with a set of propositions about depression and its treatment.  

A brief paper on lay beliefs about illness by Williams and Wood (1986) proves very helpful in clarifying the complementarity between Kleinman's work and Rippere's with respect to the conceptualization of illness beliefs about depression. Williams and Wood presented a model of common-sense explanation of illness (p. 1437) which disclosed two modes of explanation. The mode used in seeking to define the formal (Kraepelinian), causal parameters of a disease, they called scientific. The mode which serves the narrative reconstruction of a personal experience of an illness, they called biographical. In Rippere's work, biographical modes of explanation draw on first-order knowledge about depression, or knowledge with an egocentric reference, and scientific modes of explanation rely on higher-orders of shared
In fact, an empirical finding from Rippere's work substantiated the view that beliefs about depression are propositional in character. Subjects in a number of her studies showed that their ideation about depression was restricted to neither self-reports of depressive mood nor to statements based solely on personal experience with depression. On the contrary, these subjects were capable of manipulating cognitions about depression in a fashion peculiar to the kind of cognitive operations one can only perform with propositions.

In addition to conceptualizing beliefs about depression in propositional terms, Rippere theorized about the derivation and teleology of depression-related cognition in a way that, while highly relevant to the author's work, extended far beyond the scope of it. Thus, Rippere's work enlarged on the theoretical background of the present project, at least, with respect to two crucial points.

First, the work offers an explanation of how individuals come by their beliefs, viz., their cultural transmission. Second, it postulates how beliefs and other cognitive schema about depression fit into the larger picture of social processes. Rippere laid particular stress on (a) the social mediation of knowledge, and (b) the essential role knowledge about depression. In Kleinman's work, both modes are integrated in the construct of the explanatory model. Illness beliefs carry the burden of the scientific mode of explanation, while illness meaning is expressed through the biographical mode. For Kleinman, illness beliefs function as propositional elements, and illness meanings, which grow out of beliefs, are affectively-bound hermeneutic elements.
that knowledge plays in fostering "preparedness" for dealing with specialized social relations and a variety of problems-in-living\textsuperscript{70}.

**The empirical**

Almost without exception, the mountain of results from Rippere’s field research are patently relevant to the present psychometric project to assess beliefs about depression. However, when those results are considered individually, the overall shape and full impact of the work tends to get lost in an atomistic blur. Therefore, for the sake of conveying the major points of relevance of Rippere’s work to the project presented here, the author will risk distorting the mosaic of Rippere’s findings by too crudely reducing them to two summary statements.

First, Rippere showed that beliefs about depression are held, in a consciously accessible fashion, by members of an allied culture.

Second, in codifying beliefs about depression, Rippere showed that a blend of personally held convictions and socially acquired ideas about antidepressive behavior are most salient among those beliefs. Attesting to the role that beliefs play in conditioning individuals’ behavioral response

\textsuperscript{70} Social preparedness, for instance, to negotiate the sick role in depression (see for example, 1980d, p. 263), and to minimize the occurrence of interactions which result in the kinds of social discontinuities that tend to be depressogenic (see for example, 1981b, pp. 175-180).
to depression, she found evidence that individuals refer, in an event contingent manner, to this highly developed and robust set of notions about what is effective antidepressive behavior.

Limitations Of Rippere's Work

For all its signal importance and clear pertinence to the author's project, there are also some notable limitations to Rippere's work which need mentioning. Two problems, in particular, concern serious constraints on the generalizability of her findings.

Generalizability to non-British, English-speaking samples

Phrases such as "Western English-speaking culture" (1976, p. 290), "English-speaking world" (1980e, p. 381), "contemporary English awareness" (Caro, Miralles, & Rippere, 1983, p. 483), or somesuch equivalents, are liberally sprinkled throughout Rippere's writing. She used them to represent the intended purview of her work. The operative premise was that the phenomena she researched are situated in a linguistically-defined macroculture which transcends national boundaries and experience. That premise must be counted as false, however.

A common language heritage may bestow significant affinities upon linguistically related cultures but it is fanciful to imagine that a common language can bestow the
organic uniformity of culture itself upon otherwise disparate human groups. On these grounds, the author gravely doubts the existence, on any meaningful or practical level, of the kind of uniform, cohesive, and monolithic cultural entity Rippere attempted to reify with terms like "English-speaking culture".

Unquestionably, there is a broad—even vast—English language community, stretching from Brisbane to Bombay. But one would be sorely misled to take it for a monolithic culture, because subtle but sturdy, culture-specific variations differentiate the way in which national groups within that broad linguistic community of English speakers relate to and experience depression. The author has directly observed, for example, marked variation in the manner in which American and Canadian English speakers construe depression. Also, one could certainly expect to find that similar variation obtains between members of the national groups of the United Kingdom.

Given this pattern of cultural variation amongst peoples who are politically joined (e.g., U.K.) or inhabit the same land mass (e.g., U.S. and Canada), how much more imposing might the differences be which would predictably obtain between members of more ethnically and geographically divergent English-speaking cultures, such as those between Britons and Americans or Americans and New Zealanders?

In an uncharacteristic departure from consistency, Rippere appears to have betrayed her own sense of the
transnational, macrocultural compass of her work. Offering her reading of the popular zeitgeist regarding depression and emotional life, she wrote of "...the traditional national ethos of systematic emotional restraint ('stiff upper lip syndrome')..." (1980f, p. 555). One instantly recognizes in the allusion to a "stiff upper lip", a cultural emblem uniquely and exclusively British. Moreover, Rippere's recourse to a concept of "traditional national ethos" stands in opposition to the idea of meaningful transnational culture, at least, in the context of beliefs about depression.

To continue, one might reasonably expect that the property of cognitive complexity which Rippere detected in commonsense British knowledge about depression would obtain in other modern Western cultures, English-speaking and otherwise. Cognitive complexity strikes one as more a property of mind than of place or social more. Contrariwise, one could not expect the highly culture-sensitive property of consensuality to be reproduced whole in other cultures. While there might be a general tendency toward consensuality of beliefs, the exact extent and nature of that consensuality would be a matter to be empirically determined on a culture by culture basis.

Finally, Rippere's own cross-cultural replication studies indicated that there are differences from culture to culture with respect to the cognitive domain which circumscribes the category of depression. Rippere and her Spanish
collaborators found that cognitions concerning depression are more salient for English speakers than they are for urban Spaniards (Caro, Miralles, & Rippere, 1983, p. 483). Although Rippere rationalized this finding in terms of an early English canon of "home medical advice" on depression, and although the finding occurred in a non-English speaking culture, the results still give one lengthy pause before embracing Rippere's work as validly generalizing to other English-speaking cultures.

**Generalizability to non-intellectual samples**

Another problem with the generalizability of Rippere's work is its narrowness, or skewed subject sampling. That is to say, her empirical findings are based, in the overwhelming majority of cases, on studies of samples quite unrepresentative of the full range of British society.

Only 2 out of Rippere's 23 independent British samples included subjects without a demonstrated level of high intellectual achievement. Even her 2 "public" samples were somewhat academically-based and can be assumed to have been skewed, to a certain degree, in an intellectual/professional direction. She described one of those "public" samples (n = 50) as "available English-speaking people...recruited as volunteers, either in their homes or in and around the schools of the University of London" (1977b, p. 186). Other than giving information about the age and sex of the sample, no other systematic breakdown of subject characteristics was given. The other "public" sample (n = 50) appears to have been more explicitly biased. Rippere described the subjects as having been "recruited volunteers in and around the Institute of Psychiatry and various undergraduate schools and central institutions of the University of London. They included undergraduate and postgraduate students, academic, research, and technical staff, and any English-speaking visitors or members of the lay public who could be co-opted. A
Of the largest of her studies, one comprised of three groups totalling 100 subjects, she said: "[it] was designed to examine the degree, pattern, and content of consensus in endorsed beliefs about depression and antidepressive behavior in members of a relatively homogeneous English-speaking intellectual subculture [emphasis added]" (1977d, p. 469). By her own description, Rippere restricted most of her field research to investigating a special and homogeneous "subculture", a sliver of the population at large.

A noteworthy feature in the design of Rippere's investigational program was the conspicuous amount of cross-validation and other replication methodology she utilized in order to warranty the reliability of her results. Nevertheless, the true robustness of those findings ultimately eluded her without some testing of the momentous heterogeneity of the British population. So, it remains hard to see, on the basis of just the work Rippere has reported thus far, how her findings can be generalized, with any con-

general practitioner, a city planner, an art restorer and several school teachers came into this latter category" (1980c, p. 90). Again, apart from the anecdotal offering at the end, no breakdown of subject characteristics was given.

72 This subject characteristic, "English-speaking", though a critical inclusion criterion, is nowhere operationally defined in Rippere's work. The consequent imprecision associated with this important variable is troubling. For instance, given Rippere's use of the adjunctive descriptor "homogeneous", it is left open to reasonable speculation whether the vagueness of the term, 'English-speaking', obscures the fact that the English speakers constituting Rippere's samples were, among other things, all or mostly native born. Had they been native born, it would have diminished the representativeness of the sample that much further.
fidence, to groups drawn from other socioeconomic strata and residing in other cultural niches even within English-speaking British life.

Relevance to clinically depressed samples

The point of focus in Rippere's work is the everyday world, and accordingly, depression is viewed in her work as an aspect of everyday experience—an occurrence on a continuum of "normal" phenomena. Rippere's framework for investigating depression, therefore, is less expressly pathological, or clinical, in orientation than almost any that one might encounter in the professional mental health literature.

Not quite 5% of the total number of Rippere's research subjects were clinically depressed. While this fact does not in itself imply the kind of problems with external validity which were discussed in the immediately preceding paragraphs, it does represent a decided and disappointing lack of relevance to the author's project. Because the present project emphasizes the clinical application of assessing beliefs about depression, it would have been helpful if

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73 32 of 685 subjects; 16 of whom were inpatients, 16 outpatients. These two depressed samples were involved in an early study (1976), the only one to include clinical groups of any kind. In addition to the depressed samples in that study, there was a psychiatric control group of non-depressed outpatients (mainly phobias and anxiety disorders) and a group of non-psychiatric, general medical outpatients. There were 16 subjects in each of these latter two groups (p. 291).
Rippere had been able to gather more information concerning the propositional beliefs of clinically depressed people in conjunction with other variables of clinical interest, such as the severity of their depressions or their responses to treatment.

Rippere vs. Kleinman on depression

An additional comment related to the clinical relevance of Rippere's work may also prove useful in further clarifying the complementary but contrasting foci of Kleinman's and Rippere's work on depression.

Being derived from the sociology of knowledge, Rippere's approach to the study of beliefs about depression concerns itself with experience which is normative and adaptive. Her exploration of commonplace beliefs about depression is an occasion to examine homespun cognition, like behavioral recipes for a "familiar problem" (depression), and not an occasion to examine an instance of naive nosology or a folk category of illness.

Kleinman's work, on the other hand, being derived from an ethnography of illness perspective, is concerned with morbidity. His approach to the study of beliefs about depression is an extension of his primary interest in the way in which culture contributes to the idiotypic construction of depressive illness from the disease, depression--whatever that may be. This orientation leads Kleinman to concentrate on a number of culturally prescribed channels of power and
relationship, such as medicine, social class, and religion, through which depressive illness is experienced. His explanatory model construct attends to the input that all of these channels have on the formation of individuals’ beliefs about depression.

Where depression has the character of something problematic yet familiar in Rippere’s work, in Kleinman’s work, it has a far more spectral and pernicious aspect. Because of a consummate emphasis on illness as personal experience, Kleinman stresses knowledge about depression which is egocentric in reference. Rippere has a corresponding respect for the fundamental nature of egocentrically-referred knowledge, but she stresses that beliefs about depression belong to a category of knowledge which is significant for its social reference. In consequence of these differences, Kleinman’s explanatory model is pervaded by egocentrically-oriented cognition, while Rippere’s ‘culturally transmitted template’ is largely taken up with cognition which is slanted in the direction of social experience.

Scaling the ideological dimension of beliefs

To conclude this appraisal of the limitations in Rippere’s work, mention must be made of a shortcoming unrelated to any standard or customary aspect of validity. It is a shortcoming reckoned from the vantage point of the author’s project.
It will be recalled that the author's project to develop a reliable means for assessing beliefs about depression was directed towards the clinical problem of treatment assignment in depression. Operationally, this meant designing a clinical assessment instrument capable of capturing that variable (or variable set) which could be used to best match individuals with the mode of treatment for depression—mainly, pharmacotherapy vs. psychotherapy—from which they would be likely to benefit most.

Believing that illness beliefs would prove the best source of "matching" variables, i.e., variables related to person-treatment mode compatibility, the author developed a questionnaire to survey adult illness beliefs about depression. The developed instrument (the BADIT) was designed to measure two content domains of illness beliefs on two continua of ideological orientation, a biomedical one and a psychosocial one.

It was hypothesized that the best indicator of treatment mode compatibility was how respondents perceived the personal controllability of depression, i.e., whether they perceived it as something which was within their personal control. Further, it was conceptualized that this indicator of perceived controllability was a latent dimension of ideological belief orientation. And, ideological orientation, therefore, was scaled to reflect this. The extreme pole of the psychosocial continuum was scaled to represent the full possibility of achieving personal control over depression,
and the extreme pole of the biomedical continuum was scaled to represent the ultimate impossibility of achieving such personal control. 74

For a project of its size, Rippere’s research generated a relatively large number of well-constructed questionnaires canvassing illness beliefs about depression. It was greatly disappointing to the author, therefore, that none of those instruments were scaled in such a way as to provide either (a) a direct measure of ideological belief orientation and, thereby, a possibly inferable measure of the dimension of personal controllability of depression; or (b) a direct measure of perceived sense of personal control over depression. The fact that assessments of these kinds were missing from Rippere’s work strongly argues for the need to develop instruments capable of making such assessments.

Rippere: In Conclusion

It is hoped that the foregoing review has made evident that the body of work on depression which Rippere produced can only be fairly described as prodigious and exemplary, by dint of its scope, originality, and quality. As previously

74 Fuller treatments of the subject matter addressed in this paragraph can be found in two other places in this dissertation. The conceptual foundations of the BADIT are discussed in an exposition of the author’s theoretical model which appears in Chapter III. A detailed description of the design of the BADIT, including a discussion of scales and items, appears in Chapter V, entitled "Phase 1. Devising the BADIT".
indicated, the work approaches being the first ethnographic study of depression in a Western post-industrial culture.

As specific studies of often isolated cultures or circumscribed segments of cultures, ethnographies are, by their very nature, exceedingly particular. It is neither surprising nor especially problematic, then, that Rippere's work should be as particular as it is. One is inclined to imagine, however, that Rippere would not be quick to join in so detached an understanding of the narrowed generalizability of her work.

Her writing reveals an unmistakable aspiration toward universality, at least, as far as "English-speaking culture" is concerned, and maybe even as far as Western European culture is concerned (e.g., see her comments regarding the Spanish replication studies). However, a critical appraisal of Rippere's research turned up serious constraints on the generalizability of her results to other cultures—even English-speaking ones—and to non-intellectual samples. Moreover, it was shown that her work was not really relevant to clinically depressed samples.

Despite the fact that her results were far less generalizable than she might have cared to consider them to be, Rippere's efforts in the area of depression research are nothing less than pioneering, and stand as a model for all who would investigate depression-relevant cognition.
Additional Contributions To The Study Of Depression-relevant Cognition

In addition to the works already reviewed, the author was able to uncover only three other English language publications in which the relation between cognition and depression was conceptualized in terms consistent with the idea of illness beliefs about depression.\textsuperscript{75} Two of those publications were of very limited significance, being reports of isolated (i.e., nonprogrammatic) studies which were small in scale, having only modest relevance to the present project. One of the points of interest about them, however, is that both were British studies dating from the period just after Rippere had published most of her work; a fact leading one to wonder at the regional currency of ideas and the influence of local research trends in the culture of behavioral science. The third publication is an integrative paper by two Canadians, prominent in the cognitive study of depression. The British field studies will be reviewed first.

Two British Field Studies

Personal depressive concept
(Bloor)

The first of the two British studies to be examined was a direct outgrowth of Rippere's work. Greatly influenced by Rippere but believing that Rippere had erred in neglecting

\textsuperscript{75} Böker refers to "a german replication study [sic]" by Hautzinger (1979, 1980) which "found almost the same patterns of antidepressive behavior as Rippere" (1986, p. 221).
to ask her subjects "to define what they meant by depression when specifying antidepressive activities" (1983, p.43), Bloor set out to establish the link between personal concepts of depression and antidepressive behavior.

Bloor inquired into what he called the "ready-formed depressive concept" by asking his subjects an open-ended question, "What do you feel is meant by being depressed?" (1983, p. 44). In a pilot study, he developed a scheme for classifying the responses of 88 psychiatrically normal subjects according to two nested dimensions.

The first, an etiological dimension, was based on whether or not a response indicated external events were causative to depression; this dimension was subsequently referred to as 'locus'. The second, a dimension of symptom severity, was intended to register "the degree of emotional disturbance referred to in the reply" (p. 44); Bloor subsequently referred to this dimension as 'depth'. Responses could be sorted into one of four possible categories: Non-External-Minor, Non-External-Major, External-Minor, and External-Major.

Bloor’s subject samples included a very mixed assortment of individuals. The subjects were all: (a) members of the Royal Air Force (British) or, presumably, their dependents; and (b) making use of a Royal Air Force hospital in West Germany. In the pilot study, subjects were sequentially drawn from medical outpatient admissions (n = 50), persons attending a prenatal ("booking"?) clinic (n = 25), and RAF personnel having annual medical exams (n = 25) (1983, p. 44). In the main study, subjects were sequential admissions at outpatient clinics (n = 47), RAF general practice surgeries (n = 26), and inpatient psychiatry (n = 27) (p. 45). Oddly enough, none of the psychiatric inpatients carried diagnoses of depression.
In the main study he reported, Bloor used a modified version of Rippere’s Antidepressive Activity Questionnaire (AAQ) along with responses to his open-ended question ("Depressive Concepts Questionnaire") in order "to investigate whether a personal concept of depression has any effect on the reported frequency of antidepressive behaviour (n AAQ checked) and type of antidepressive behaviour reported (t AAQ checked)" (p. 46).

Bloor found that a majority of the 49 men and 51 women (aged 17-73 years, M = 29.68) he studied "viewed 'being depressed' as a state characterized by quite major experiences of sadness and helplessness, unrelated to external events" (p. 50). A greater depth of depressive concept, i.e., relatively greater symptom severity, was found to be associated with a higher level of reported antidepressive activities; a relationship independent of subjects' sex, age, and the locus of their depressive concepts. In fact, depth of concept was the only variable among those investigated which appeared to have had any significant effect on the amount or frequency of antidepressive activity which subjects reported they engaged in (p. 49).

A neighborhood ethnography (Keeley-Robinson)

The other British study which finds its way into the body of literature on illness beliefs about depression, although quite small in scope, had the decided character of an ethnographic survey.
Motivated by an interest in promoting a more active role for health visitors77 in forestalling clinical depression among women, and beginning from the supposition that "there seems little known about what lay people regard as depression" (1983, p. 11), Keeley-Robinson conducted a 1981 canvass of an inner-city London neighborhood (Lambeth) "to explore what the term depression means [emphasis added] to some women with young children".

In a brief report, Keeley-Robinson described having knocked on consecutive doors of both "working class" and "middle class" homes in order to amass a sample of 20 willing informants--10 mothers from each socioeconomic group with children under 10 years of age. She interviewed the women in their homes, using a "set questionnaire" and an interpretive task involving a case vignette of "borderline depression with a range of possible causes" to gather information about: (a) what their experiences with depression had been like—if they had been depressed—including their thoughts about what caused their depressions and what remedies they tried; and (b) "their general ideas on the symptoms, causes and remedies for depression" (1983, p. 11).

Respondents showed "a great range of opinion about how depression could be recognized and what emphasis should be placed on the various signs of depression" (p. 11). They

77 The 'health visitor' is a fixture of the National Health Service in England. Something like a circuit-riding visiting nurse, the health visitor functions in a consulting and primary prevention role unknown in all but the most rural areas of the United States.
had varied thoughts as well on etiological matters such as "how a person’s situation could influence the onset of depression" (p. 11).

In terms of antidepressive behavior, the survey results indicated "a range of responses to depression" (p. 12). For instance, Keeley-Robinson found that the middle class women were much more likely to have shared their problems with a friend than were the working class women. Although she acknowledged that the results from her small sample might not have been representative of the wider (British) population, Keeley-Robinson believed that they confirmed the significant instrumental value of social support in the enactment of effective self-help responses to depression (pp. 12-13).

Illness Beliefs about Depression from an Interpersonal Perspective: The Prototype for Depression

The final contribution to the literature on cognition about depression to be examined here is an extremely noteworthy paper by Cane and Gotlib (1985) on the cognitive representation of depression considered from an interpersonal perspective. The authors, who approached their subject by way of a thoughtful integration of several relevant research literatures, began their essay by presenting, and stating their endorsement of, the interactional model of depression. From there, they reviewed some cognitive theory and information processing studies in order to introduce the classification construct known as a prototype.
The prototype was described as a cognitive scheme with optimal value for classifying phenomena in the external world, especially socially-indexed phenomena which have particular salience for members of our species. The authors, then, introduced the central element and hallmark of their essay, the **prototype for depression**.

Cane and Gotlib asserted that the way in which we represent the category of depression to ourselves, that is, our implicit conceptualizations about depression—our beliefs about what depression is and, by extension, what depressed people are like—conform to an internalized prototype for depression. In their words, that "prototype for depression contains information both about depression as a disorder (e.g., its etiology and treatment) and about the characteristics of a person who is depressed" (1985, p. 350).

It is instructive to note that the preceding comment was immediately followed by an assessment of the state of knowledge of depression-relevant cognition, an assessment echoed by every contributor to the area⁷⁸: "To date, relatively little is known about people's beliefs regarding the etiology and prevention of depression."

Because the relatively little which is known about beliefs is owing to the efforts of Rippere, her studies of

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⁷⁸ This same assessment was also echoed by nearly every investigator with even a related interest in the area—e.g., Fisher & Farina (1979, p. 321), Furnham (1984, p. 95), Huesmann (1978, p. 196), Weinstein (1972, pp. 38 ff).
Britons’ beliefs about depression were reviewed by Cane and Gotlib as a matter of course. But more than that, Cane and Gotlib’s concerns were conceptually quite close to Ripperée’s. They share an emphasis on the critical role that cognitive schema play in preparing individuals to conduct their social relations to the most harmonious effect. In that shared emphasis, lay beliefs about depression are viewed as an intrinsic part of the culturally embedded information we need in order to be competent in negotiating social interactions made especially complex by the involvement of depressed participants, whether the depressed parties are ourselves or others.

In contrast to Ripperée’s focus on illness beliefs, i.e., beliefs about depressive illness, however, Cane and Gotlib’s focus was chiefly on beliefs about depressively ill persons. In Cane and Gotlib’s paper, the entire significance of illness beliefs about depression stems from beliefs being the implicit source of the consensually shared information codified in the prototype for depression and serving as the basis of "the manner in which depressed persons are perceived" (p. 341).

In fact, Cane and Gotlib’s intent in appropriating the prototype construct appears to have been for the express purpose of bringing fresh attention to bear on the cognitive basis of the perception of depressed persons, their behavior, and situations involving them. Accordingly, what is truly distinctive about Cane and Gotlib’s work is the stress
it places on the activation of the prototype for depression, and the consequences of that activation for social interaction and the maintenance of depression.

In a section dealing with the relation between two categories of social cognition, 'mental illness' and 'depression', the authors offered some enlightening comments on the way in which that relation informs the content of the prototype for depression:

Having had some first-hand experience with depressive symptomatology, a person observing depressive behavior in others may be inclined to perceive this behavior as part of the normal range of affective experience, if perhaps somewhat severe. Indeed, in contrast to "mental illness," even more extreme forms of depressive behavior are likely to be perceived as differing from normal behavior quantitatively rather than qualitatively. (1985, p. 349)

They made the point, consistent with findings reported by both Rippere and Keeley-Robinson, that either acceptance or self-help appear to be the modal responses to depression because depression does not have a culturally-transmitted aura of morbidity associated with it, as do other forms of psychiatric illness.

It is interesting to see how entrenched the perception of depression is as something relatively benign. The perception, coupled with a behavioral disposition to meet depression with either passivity or self-care, persists despite massive public interest ad campaigns79 to make Americans aware of the potentially great dangers of un-

79 Some of these campaigns have been sponsored by the American Psychiatric Association and endorsed by regional mental health agencies and associations.
treated clinical depression, not the least of which is depression-induced suicide. The persistence of this perception suggests that beliefs about depression are resistant to change by didactic persuasion alone; attesting, once again, to the importance of illness beliefs in motivating, organizing, and otherwise shaping a behavioral response to depression.

Rippere made the observation that, in addition to having a relative degree of fixity, people's beliefs about depression are surprisingly robust. Her research showed, for instance, that people were apt to maintain a belief in the usefulness of certain antidepressive activities even in the face of disconfirming personal experience (1976, p. 297). She also made certain to point out (elsewhere), however, that beliefs about depression were permeable to experience, being flexibly adjustable to prevailing circumstance (e.g., 1977b, pp. 190-191).

In a highly valuable concluding section to their paper, entitled "Implications and Directions for Future Research", Cane and Gotlib demonstrated a special keenness for the shifts that beliefs are liable to undergo, particularly in the wake of interpersonal processes.80

80 It is useful to recall Kleinman’s mindfulness about the mutability, transience, and situational fit of beliefs, attributes which were built into his explanatory model construct. Explanatory models are held to be operative for specific episodes of illness, only, with each successive experience with a given form of sickness layering over pre-existing explanatory models and associated illness beliefs.
Finally, Cane and Gotlib's insistence that "the development of a reliable procedure for classifying and describing an individual's depression prototype must precede or accompany any attempts to assess the significance of these beliefs..." (p. 361), further validated the need to carry out the present psychometric project.

The Strengths Of An Ethnomedical Approach

By way of concluding this section, I would like to highlight Kleinman's conceptualization of the field of ethnomedicine, as it was a major feature of this review of literature dealing with beliefs as anthropological units of study. In addition, Kleinman's ethnomedical framework made an inestimable contribution to the present project by providing a base perspective on both the study of illness beliefs about depression and their proper assessment.

Ethnomedicine inclines toward a macrolevel view that is inclusive of all phenomena bearing on health, illness, and healing relationships. And as an anthropological view, it emphasizes meaning, the product of the constructive and interpretive functions of culture.

With regard to depression, ethnomedicine provides an integrative framework for appreciating the interplay among depressive experience, beliefs about depression, and antidepressive activity, and the way in which all are defined by culture. For considering the clinical situation in depression, i.e., when response to depression leads to treatment
seeking, the framework excels at revealing the social realities that inhere in the relationships between depressed persons, their treatment expectations, and local arrangements of the health care system.

One of the great strengths of ethnomedicine is its ability to provide a framework which generates a single coherent view of the psychological functioning of the depressed individual in a fully realized social context. As well as offering a unifying structure for the many diverse theories of depression emanating from nearly every discipline, an ethnomedical framework also has the capacity to integrate smaller scale perspectives such as those typical of the study of psychological processes. For example, detailed analyses of attributional cognition (e.g., Metalsky & Abramson, 1981), and microanalytic studies of depressed individuals' beliefs about depression (e.g., Teasdale, 1985) and the cognitive dimension of their interactions with others (e.g., Cane & Gotlib, 1985) are the kinds of contributions which can be easily enfolded within an ethnomedical framework while creating little conceptual dissonance.
SECTION F.
SELF-EFFICACY THEORY: BELIEFS
AS BEHAVIORAL EXPECTANCIES

In the general literature of psychology one commonly finds that, where matters of seminal interest or grave consequence are concerned, more than a few workers have addressed the same issue, or have attempted to describe the same phenomenon. What results from this convergent activity is a number of seemingly different views of the same issue or phenomenon. Occasionally, these views differ in emphasis, based either on ideological differences or disparate angles of observation. More usually, concurrent views only appear different, mainly because of superficial variations in language use that grow out of investigators' penchant for concoing new and proprietary jargon.

In some rare instances, an explanatory system of constructs and rationale is so completely elaborated, and a research paradigm is so well developed for testing the hypotheses it generates, that it clearly stands out as more than just another way of saying "the same old thing". An instance of such an exception is the self-efficacy theory of Albert Bandura, and this last section of the literature review is devoted to a highly specialized treatment of it.

A brief discussion of self-efficacy theory appears at this point in the dissertation in order to help lay the conceptual groundwork for, and provide a segue to, the exposition of the author's model of belief-mediated response.
to depression which follows at the conclusion of this section (and chapter). Self-efficacy theory is important to the present study because it helps to underscore, in a general way, the role which beliefs play in mediating behavioral response to depression. In a more focused and more essentially valuable fashion, the theory helps to refine the concept of perceived controllability of depression which is the core of the author's assessment project.

Self-efficacy theory introduces another kind of beliefs, efficacy beliefs, into the present consideration of the role that beliefs play in depression. The theory also introduces a novel framework for conceptualizing efficacy beliefs which discloses perceived controllability to be a cognitive factor with several levels of meaning.

In so far as it relates to the present investigation, the general self-efficacy framework is briefly presented here. Implications of the framework, for the enactment of antidepressive response and its potential impact on self-esteem, will be worked out in the author's model.

A Common Cognitive Mechanism Mediating Behavioral Change

One of the towering figures in twentieth century psychology, Bandura developed self-efficacy theory out of the broader context of his work on a social learning approach to human behavior (1977b). In that approach, cognitive processes, as opposed to environmental stimuli, assume a
dominant role in organizing and motivating self-regulatory behavior.

Initially, Bandura postulated self-efficacy theory as "an integrative theoretical framework to explain and predict psychological changes achieved by different modes of treatment [emphasis added]" (1977a, p. 191). He later expanded the theory's scope to encompass human agency, in general (1982).

Bandura identified self-efficacy as a "common cognitive mechanism" underlying behavioral and psychological change. The inner workings of that mechanism he attributed to cognitive events that "are induced and altered most readily by the experience of mastery arising from effective performance" (1977a, p. 191). Self-efficacy theory, therefore, is built around those cognitive events in which people form evaluative percepts of their (performance) capabilities in relation to the demand or arousal characteristics of given situations. Bandura's work focuses on self-efficacy percepts or "judgments of how well one can execute courses of action required to deal with prospective situations" (1982, p. 122) as a particularly instrumental species of self-referent thought in human affairs.

Outcome vs. Efficacy Expectations

Bandura defined two classes of beliefs as governing situations in which self-efficacy mechanisms operate. One class of beliefs is comprised of outcome expectations:
rationalized expectancies, or "estimates", that given behaviors--were they to be executed by anyone--would lead to certain outcomes. The other class is comprised of efficacy expectations: subjective expectancies, or "convictions", that one can be personally successful at executing the behavior required to bring about designated outcomes (1977a, p. 193).

Outcome expectations are a class of beliefs about the ostensible nature of situations. They conform to descriptions of "objective" public reality, and are rendered in universal terms. Efficacy expectations, on the other hand, are a class of beliefs about one's self and one's competence. They are highly subjective, being drawn from the private commentary on the self which is unique to every individual.

The influence and specificity of self-efficacy expectations

Bandura argued for the wide and deep influence of efficacy expectations. He held that in addition to having a "directive influence" over the choice of activities people will engage in, and the behavioral settings they will enter, efficacy expectations affect people's coping efforts. He claimed that "efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts (1977a, p. 194)".
It is important to understand that while Bandura theorized that "once established, enhanced self-efficacy tends to generalize to other situations in which performance was self-debilitated by preoccupation with personal inadequacies" (p. 195), he was unequivocal in postulating efficacy expectations as highly context specific cognitive factors.

Bandura pointed out that the contextual specificity of self-efficacy theory was continuous with the social learning approach from which it emerged. The social learning approach was "based on a microanalysis of perceived coping capabilities rather than on global personality traits or motives of effectance", and Bandura was adamant that "to elucidate how self-efficacy affects behavior requires a microanalysis of both [personality/dispositional and situational] factors" (1977a, p. 203).

The Varieties of Futility

Bandura posited that futility is the subjective state which results when individuals find themselves unable to influence events and social conditions that significantly affect their lives (1982, p. 140). One of the ways in which he defined the distinction between self-efficacy and outcome beliefs was by identifying each type of belief as a separable source of futility:

81 "Expectations of personal efficacy do not operate as dispositional determinants independently of contextual factors" (Bandura, 1977a, p. 203).
People can give up trying because they seriously doubt that they can do what is required. Or they may be assured of their capabilities but give up trying because they expect their efforts to produce no results due to the unresponsiveness, negative bias, or punitiveness of the environment. (1982, p. 140)

Bandura delineated the kinds of behavioral and affective reactions that different patterns of interaction between self-efficacy and outcome beliefs were likely to engender. For instance, he proposed that an "assured, active responsiveness" results when a high sense of self-efficacy combines with a belief that a contemplated action is very likely to prove successful--this being the most positive product of the interaction between the two kinds of beliefs.

Bandura asserted that "considering the joint influence of self-efficacy and outcome beliefs provides a basis for differentiating conditions conducive to apathy from those likely to induce despondency" (p. 141). A low sense of personal efficacy and negative outcome beliefs tend to produce apathy and resignation "to a dreary life", but "the pattern in which people perceive themselves as inefficacious but see similar others enjoying the benefits of successful effort is apt to give rise to self-disparagement" (1982, p. 141).

The difference between the pattern of beliefs which leads to resignation and apathy and the pattern which leads to self-devaluation and despondency is instructive for the present study. The significance of the difference becomes more comprehensible, however, when efficacy and outcome beliefs are expressed in terms of perceived controllability.
Controllability Beliefs

In a 1982 revision of self-efficacy theory, Bandura highlighted perceived self-regulatory efficacy as an especially salient source of efficacy expectations. He described self-regulatory capabilities as dependent upon both "tools of personal agency and the self-assurance to use them effectively" (p. 129). With respect to self-regulation, then, beliefs about one's ability to exercise effective control over one's self, i.e., one's affectivity, behavior, and cognition, constitute efficacy expectations.

Self-control vs. personal control

Before continuing, it is important for the reader to be aware of an approaching shift in the author's focus, from an emphasis on self-control to an emphasis on personal control. Achieving self-control represents, perhaps, the most universal and, certainly the most pertinent, form of personal control to which individuals aspire.

The consequences of an inability to achieve effective self-control are far-reaching and, quite frequently, all too evident to others. There are numerous occasions, however, when attempting to achieve personal control over a given situation does not involve an attempt to exert a controlling influence over one's self. It strikes the author that these categories, personal control and self-control, are sufficiently interrelated to warrant some degree of extrapolation from one to the other.
Although Bandura did not explicitly conceptualize self-efficacy theory in terms of personal control per se, he took pains to discriminate belief in personal efficacy from the kind of generalized expectancy of personal control associated with Rotter's locus of control construct (for example, see Bandura, 1977a, p. 204). Given the breadth and multidimensionality of self-regulatory activity, it is hard to imagine any undertaking in which an expectancy of personal efficacy—as a belief in personal control—does not play, at least, some part. Nevertheless, there is a distinction between Rotter's construct and Bandura's, and it lies in the context specific nature of the expectation of personal control in self-efficacy.

As an efficacy belief, the anticipation that one will be successful in exercising personal control over a critical situation is always configured out of multiple streams of information about the self-in-that-particular-situation.\(^\text{82}\)

**Expectancy of personal control as an outcome**

Now that we can appreciate how beliefs about personal control can operate as context specific efficacy expectations, it is a short step to appreciating how beliefs about

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\(^{82}\) This is not the case with the generalized behavioral expectancy featured in Rotter's theory. Bandura characterized Rotter's theory as "primarily concerned with causal beliefs about action-outcome contingencies rather than with personal efficacy" (1977a, p. 204).
the general possibility of achieving personal control over a defined situation can operate as outcome expectations.

Bandura pointed out that evaluative judgments, or percepts, about the likelihood that contemplated behavioral plans will yield successful outcomes constitute a key stream of information that shapes the self-efficacy mechanism. In many instances, these evaluative judgments about outcome hinge on a perception of whether or not the considered situation is inherently amenable to some form of personal control. To reiterate somewhat: in the sense that beliefs about the feasibility of asserting personal control operate as outcome expectations, they are a source of commentary on the relative usefulness or futility of efforts directed at achieving control brought to bear by anyone, irrespective of their capabilities or level of self-efficacy.

Efficacy and Outcome Expectancies for Personal Control as Separable Sources of Futility

Bandura's scheme for discriminating the varieties of futility, based on an analysis of the joint influence of efficacy and outcome beliefs, is easily and well transposed to a consideration of those beliefs as expectancies for personal control. In other words, outcome beliefs about the general feasibility of personal control and efficacy beliefs about individual ability to actually achieve personal control set up a grid-like pattern of interactive effects which can be differentially examined.
A belief interaction of particular interest is the case, noted above, which leads to self-disparagement. In that instance, with respect to controllability beliefs, individuals judge that it is indeed feasible to attain some measure of personal control over a given situation, but, for some reason\textsuperscript{83}, believe themselves personally unable to effect that control.

By representing the various subjective positions of futility with characteristic self-statements, we can gain a sharper sense of some of the differences between them. For instance, "Others can do it but I can't" would represent the subjective position of self-disparagement just previously discussed; whereas, "I could/can do it but it can't be done" would well represent the subjective position of apathy and resignation which results when high self-efficacy combines with negative outcome expectations.

Proxy control

In a negative way, Bandura did address the question of self-efficacy as belief about personal control. He raised the matter in discussing individuals who undermine their self-efficacy by relinquishing their personal control. He described that process as follows:

\textsuperscript{83} Beliefs about self-inefficacy may arise from a number of different self-percepts, such as judgments about the lack of relevant "tools of personal agency" (1982, p. 129)—"tools" being an umbrella term encompassing behavioral skills, material resources, gumption, etc., whatever the particular configuration of a situation requires.
People are not averse to relinquishing control over events that affect their lives in order to free themselves of the performance demands and hazards that the exercise of control entails. Rather than seeking personal control, they seek their security in proxy control--wherein they can exert some influence over those who wield influence and power. Part of the price of proxy control is restriction of one's own efficacy and a vulnerable security that rests on the competencies and favors of others. (1982, p. 1421)

This notion of proxy control is highly relevant to the variety of futility characterized by self-disparagement. In that instance, proxy control stands as a possible alternative to the bleak prospect of not only finding oneself wanting and devalued, but of being at the mercy of events which are out of one's control as well. With proxy control, one, at least, gains from having aversive situations brought under control.

Proxy control also holds the possibility of softening the self-disparagement of perceived comparative inefficacy through a rationalized relationship with a powerful, sanctioned other; a relationship which may additionally provide the kind of blandishments that often accrue from a subordinate association with a beneficent proxy.

The subjective position of proxy control can be characterized by the self-statement, "Even if I can't control it, someone else can, for me". It is necessary to bear in mind that the proxy control option is only operative when there is a corresponding outcome belief that personal control is feasible i.e., possible for anyone to attain. In the exposition of the author's model, the proxy control
option achieves significance as an important exemplar of one of the major treatment choices in depression.

Overview

A review of Bandura’s self-efficacy theory has brought to light a social learning framework for conceptualizing a matrix of cognitive, behavioral and environmental factors from which self-directed behavior springs. The framework is heavily weighted toward modeling the interaction between self-referent thought (efficacy beliefs) and universalized appraisals of behavioral contexts (outcome beliefs). A noteworthy attribute of the framework is that it posits this belief interaction as an antecedent condition of planned behavior.

The self-efficacy framework is highly valuable for the present study because the model of cognitive process it features can be used to represent the interaction of beliefs about personal efficacy and illness beliefs about the controllability of depression. Further, when this cognitive interaction is transposed in terms of self-referent and universalized beliefs about the controllability of depression, the framework provides a means of analyzing the resulting pattern of different effects. An analysis of just this kind is presented as a principal element in the author’s model of belief-mediated response to depression.
Assessing Beliefs About Depression and its Treatment

By

Eliezer Tzvi Margolis
CHAPTER III

A THEORETICAL CONTEXT FOR ASSESSING BELIEFS ABOUT DEPRESSION: A MODEL OF BELIEF-MEDIATED RESPONSE TO DEPRESSION

Introduction

In this chapter, I offer a comprehensive account of the role which several aspects of belief play in mediating individuals' responses to the predicament of depression. As the account links together three or four conceptually independent theoretical schemes, a few prefatory comments will help orient the reader to some of the complexities inherent in the overall model's content and structure. Also, although the account is original, it draws on a synthesis of others' work, and these influences will be identified at the outset.

Transtheoretical Cognitivism

If the model inclines toward any particular theoretical position, it is a cognitive one. The cognitivism of the model is evident in (a) the preeminent place accorded to beliefs, and (b) the motivational role ascribed to beliefs as antecedents to behavior.

The brand of cognitivism reflected in the model grows out of a tradition of several converging streams of contemporary psychological thought. This tradition stresses the
critical importance of apperception and inferential cognition in the initiation and organization of planned behavior. Each of the representative streams of thought is highly regarded today for its heuristic utility in generating hypotheses about the psychological nature of a range of clinical problems.

One of these streams of thought is attribution theory. First developed about thirty years ago by Heider (e.g., 1958), its cognitive focus is on individuals' beliefs about the underlying cause-effect relationships which govern the significant events in their lives.

Another of these streams of thought is embodied in the theorizing about cognitive appraisal which runs through the stress and coping literature and is notably featured in Lazarus and Folkman’s writing (see for example, 1984). It should be noted, however, that Arnold’s theory of emotion (1960), advanced more than 20 years ago, was the theoretical precursor of the idea that the physiological impact of a stressor is mediated by an appraisal of the threat the stressor represents.

A third stream of thought is comprised of a wide variety of formulations which have sought to bridge doctrinal behaviorism to more social psychological and cognitive perspectives. Social learning theory is one of the more prominent varieties of thought characteristic of this third stream. There are, additionally, a host of self-regulation and self-control approaches which show the distinctive in-
roads that information processing and cybernetic theory have made on this school of thought (e.g., Kanfer, 1977; also, see a 1982 review by Carver & Scheier).

This third, cognitive-behavioral, stream of thought has had a sizeable impact on the postulation of the model presented here. First and foremost, key elements of Bandura's self-efficacy theory (1977a, 1982) were overtly adapted to play an integral role in the model. Secondly, one of the core conceptual components of the model was fashioned along the lines of Rosenbaum's social behaviorist model of self-regulation (in press). Finally, an article by D. H. Shapiro, Jr. (1983a), which adopted a systems theory approach to self-control strategies in health care, had a highly formative effect on the overall conceptualization of the project.

Apart from its avowedly cognitive character, the author's model has no other theoretical ties. In fact, one of the strengths of the overall model is that it undertakes a transtheoretical description of phenomena that are most commonly rendered by divergent ideological perspectives in terms which are exclusively biological, psychological, or social. In this respect, the model presents an ideologi-

1 The Shapiro article in question was as formative as it was because it encompassed three issues which were generative for the present study: (a) It emphasized the role of beliefs in the context of the treatment situation, particularly treatment situations for which self-control regimens might be appropriate; (b) it used the term 'orientation' as a way of characterizing beliefs; and (c) it projected a consuming interest in using beliefs to help match treatment, person, and clinical problem.
cally integrative framework in which to consider the phased processes which comprise a number of separate pathways of response to depression (not all of which lead to or quicken recovery).

Connected Models

As was previously mentioned, the overall model unites several modeled processes. A generic model of the human healing process serves as the foundation of the overall model, and it will be useful to think of the overall model as an iteration of the generic healing model in the particular instance of depression. Among other things, the generic healing model advances a view of the healing process in which belief factors play an integral role.

The core of the overall model is devoted to modeling the way in which beliefs factor into the process of cognitive appraisal that ultimately determines the kind of response which the situation of depression elicits from the depressed person.

Finally, it should be understood that the overall model of belief-mediated response is, itself, a general model, describing response to the situation of depression. The model has been specifically devised, however, in order to fully represent the case of response to the treatment of depression. In other words, the model covers that instance of response to depression which is probably of greatest interest to treatment providers and clinical researchers, the case in
which response to depression involves seeking out and engaging in professional treatment.

As the exposition of the overall model proceeds, the web of relationships that obtains between the various general and particular aspects of the component models, just discussed, will become increasingly clear.

**A Generic Model of Human Healing**

At the outset, I would like to credit Andrew Weil’s treatise on medical treatment, *Health and Healing* (1983), as the source for much of the key content of the generic model of human healing being set forth here. In particular, I have used Weil’s schema of effective treatment--its ingredients and mechanics--as an outline of sorts, upon which I have substantially enlarged.

**Premise One: Healing as an Innate Function**

This model of the human healing process is founded on the premise that healing is an *innate* function of the organism. In this model, healing is regarded to be an inborn (and indispensable) capability and an intrinsic activity. Because of the extremely close association frequently observed between the sundry manipulations of treatments and the occurrence of curative responses, it has become customary to think of healing as a property of treatment encounters. Although this is the familiar view of healing in our
culture, it a mistaken one according to the model of human healing being offered here.

If the locus of healing resides within the ailing person, and healing is neither the property of treatments nor of treatment providers (healing practitioners), what, then, is the relationship between treatment and healing? In this model, treatments are postulated as **adjunctive** to healing. Treatments can stimulate and augment the healing process, or they can suppress and impede it, but they do not constitute healing per se. The effect which treatments have on the healing process is a direct result of their characteristics. Before examining those characteristics and their relationship to healing, let us first develop an understanding of how healing is "accomplished".

Premise Two: The Arc Of Organismic Responsivity

The second major premise of the generic healing model is that healing is an outcome of an **arc of organismic responsivity**. In the model, the healing process is held to be the final common pathway for an integrated mind-body response to the organism's intrinsic regulatory demands to heal itself, and to vectors of environmental influence—most especially, extrinsic manipulations (treatment) intended to induce healing. Healing is achieved when the magnitude of organismic activity that is sparked in the arc of integrated responsivity exceeds a given threshold, a threshold which varies with each new and different organismic challenge.
Beliefs are capable of being the potent agents of healing which they are because both psychological and biological mechanisms of healing are integrated in an arc of organismic response. For this reason, the concept of total organismic responsivity is of prime significance to the overall model.

The concept of organismic responsivity unifies two notions of total response. One notion is that the organism responds to the treatment context and all its many variables as a totality, i.e., response to the context is not differentiated. The other notion is that the arc of integrated response which occurs within the organism, to the treatment context, is a total response in the sense that it is a summed response. That is, it is the combined product of a number of different healing mechanisms.

In the area of psychiatric treatment, it is customary to study treatment response by considering central nervous system, personality, and ecological factors in linear, piecemeal fashion. The conceptualization of treatment response as a phenomenon of total response makes this distorted segmenting unnecessary, however.

Finally, it is pertinent to note that the idea of a healing arc of organismic responsivity in humans has recently received some empirical corroboration in findings from the burgeoning field of psychoneuroimmunology (see for example Ader & Cohen, 1985; for reviews see Ader, 1981, and Jemmott & Locke, 1984).
Characteristics of Treatment

In order to understand how some treatments are able to promote the healing process, we must consider some of the characteristics of treatments. These are distributed along several dimensions.

Activity, perceived activity, specificity, and intrinsicalness

The first dimension relates to the activity or inactivity of treatments. A treatment is active if it is responsible for bringing about a marked change in the state of an organism; it is inactive if it does not. It should be kept in mind, however, that treatment activity is very much a relative matter—treatments are seldom entirely active or inactive. Furthermore, the salient characteristic of treatment activity, where humans are concerned, is whether the treatment’s profile of activity is accompanied by an immediately perceived effect, or whether it promotes awareness of the desired change in state it was devised to achieve. In this respect, the true activity of a treatment can be very different from its perceived activity.

Some very active treatments are "silent", while others which are a good deal less active can intrude quite prominently on an individual’s consciousness. Some examples of these will be presented below, in a discussion of the relationship of perceived treatment activity to the propagation of belief-mediated responses to treatment.
Another dimension of treatment, one which modulates the activity of treatments, is specificity. This has to do with whether the changes brought about by active treatments are desired and/or conform to a treatment rationale. Specificity enhances activity, so that the same treatment may be relatively inactive in one situation because it is used in a nonspecific manner (e.g., body massage for tension headache) and highly active in another due to its more specific use (e.g., massage of tense muscle groups). Treatment specificity can be thought of as the relevance of a treatment to some essential pathology which the treatment is designed to act upon.

A treatment can be said to be 'active though nonspecific' when it contributes to an ill person's sense of improving health, but not by acting directly upon the underlying condition which purportedly caused him or her to feel ill. Similarly, when treatments are employed for their reliable and desirable results even though their mechanisms of action are not understood, then the manner of their use must also be characterized as nonspecific.

Another dimension of treatment relates to whether the treatment is devised to act intrinsically or extrinsically. Conventional Western medical practice is predicated on the basis that the greatest extent of healing is brought about by the application of the most specific and most active

2 All of the changes brought about by drug activity which we do not seek or cannot rationalize, we colloquially refer to as "side effects".
treatments. In addition, conventional Western medical philosophy has a rather one-sided, materialist investment in the mind-body duality. As a consequence, the most valued form of Western treatment involves intervening in the body's internal operation; the more miniscule the target of treatment activity the better. This prized form of Western treatment symbolizes adherence to a principle of treatment activity which is intrinsic as well specific.3

The Heart of the Generic Model: Belief-mediated Healing

Now that we have an appreciation of some of the characteristics of treatments, we will see how those characteristics are expressed in the relationship between treatment and healing. Also, it is at this point that we will come to see that the generic model of human healing is, at heart, a model of belief-mediated healing.

A significant portion of Weil's book was devoted to "building a case for belief as the crucial factor determining the success or failure of medical treatments" (1983, p. 204). He asserted that "any treatment—whether allopathic drugs and surgery, homeopathic remedies, chiropractic manipulations, shamanistic rituals, or Chinese acupuncture—includes two distinct elements: the direct effect of the treatment itself (if any) and the belief it

3 One can observe that a marked partiality for intrinsic treatment tends to degrade to an indiscriminate reliance on ingestible or injectable medicines.
elicits in both practitioner and patient" (pp. 204-205). Although Weil openly recognized the direct effect of treatments in mobilizing the healing process, he held that "belief is the master key to healing, [and] that the physical mechanisms of cures of disease, whatever their nature, make connections to the immaterial realm of mind" (p. 205).

Weil's assertions regarding the role of belief factors in healing are very strongly worded—-even, categorical. But writing for a primarily Western audience, perhaps they need to be, in order to assure that 'mind' is properly instated in the healing equation, i.e., that healing is always and everywhere the outcome of an integrated response of mind and body.

Three ingredients of treatments which promote healing

Weil propounded that "two distinct elements" [emphasis added] were responsible for achieving the healing associated with successful medical treatments. One element was belief and the other was the direct effect of the specific activity of treatments. The element of belief was, in turn, comprised of two ingredients, both inspired by treatment. One was the practitioner's belief in the treatment, and the other was the patient's belief in the treatment. I think it beneficial, for the purpose of analyzing treatment situations, to consider these treatment-related beliefs separately. Therefore, in this generic model the factors which
promote healing are defined as three ingredients. (Later, we will see that Weil actually proposed that a third category of beliefs, a fourth ingredient, operates in the treatment situation.)

Before examining some of the other parameters of the treatment-healing relationship, it will be useful to conceptualize the three ingredients of effective treatment in terms of the previously considered distinction between illness and disease.

The affinity of belief ingredients for illness

In the tripartite scheme, the ingredient of specific treatment activity is conceptualized as directed against disease; disease being the aspect of sickness which is alien to and feared by the ill person but cannot be experienced by him or her. Illness, on the other hand, is the full representation of the individuals' experience of sickness, and includes, to the degree that it is coherently organized, what they believe is wrong with them. The belief ingredients of effective treatment have their greatest affinity with the illness aspect of sickness. And so, illnesses are uniquely subject to the operation of beliefs.

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4 See pp. 147-149, Section E of the literature review which appears in Chapter II.
When disease does not produce symptoms, it is disease without illness. Such "silent" instances of disease can not be not experienced in human terms and, therefore, are not presented for treatment. Consequently, it is only illnesses which receive treatment, which means that, to some extent, all treatments involve belief-mediated responses.

Belief ingredients and the placebo response

The fact that all treatments, to one degree or another, turn on belief-mediated responses to achieve their effects, points up the spuriousness of discriminating placebo responding from other forms of treatment response.

In its technical usage, "placebo responding" is the name we reserve for the belief-mediated response that is forthcoming when a treatment is applied which is known to be irrelevant, and which usually has a practically imperceptible profile of activity (such as that associated with the metabolism of a milk sugar capsule). It is assumed that, in both controlled experimental settings and natural practice settings, individuals who are unaware that they have been administered "placebo" (i.e., nonspecific and inactive) treatments exhibit significant rates of curative response because of their strong belief in the efficacy of their ostensible treatments.

\[5\] Witness certain stages in the development of cancer, hypertension, and aneurysms, for example.
Where the notion of placebo response might have usefully served as a prototypical case of belief-mediated responding, it became, instead, firmly lodged in both scientific and popular cultures as an exotic species of treatment response. As a result, uncritical conventional usage of the term 'placebo' has obscured the fact that belief-mediation is inherent in the activity of all forms of treatment. And so it is today that most people tend to reject, at first glance, the idea that so-called "placebo responses" are inextricable cofactors of nearly all treatment responses.

When belief ingredients become critical

Now that it has been clarified that beliefs almost always play an active role in the treatment-healing equation, we will look at the circumstances under which the belief ingredients of treatment become the critical agents of healing.

To begin with, it will be helpful to consider that for every illness-treatment situation there is a unique arrangement of treatment ingredients. All three ingredients are present in the treatment situation and are related to the healing process in either a positively or negatively graded manner. It is assumed that optimum mobilization and augmentation of the innate healing process is achieved when all three ingredients have steep, positive gradients, i.e., when the treatment is highly specific and highly active (direct
effect), and both the patient and the practitioner attribute great efficacy to it (belief).

The grading of treatment ingredients

Recalling that there is a threshold of organismic response which must be reached in order for healing to occur, we can note that for treatments to be effective they rarely need to be characterized by ingredients which have uniformly positive and steep gradients. For instance, in order to speedily and satisfactorily assist the mind/body in its efforts to heal a nasty sinus infection, it is essential that there be a very positively graded direct treatment effect, which by itself will most likely be able to surmount the healing threshold. In fact, in the case of a sinus infection, it is probably true that the belief gradients can be either flat or, even, negative, and the treatment will still be effective in promoting healing.

In considering the grading of treatment ingredients, it is further postulated that the rate and magnitude of organismic response, which is the engine of the healing process, will be directly affected by the composite of graded ingredients in every treatment. In other words, although a given combination of gradients might suffice in helping a person attain the healing threshold, the healing process might be quickened and/or made more intense by enhancing the gradients of one or more of the treatment ingredients.
Casual observation reveals that it is typically the case that the gradient of a treatment's direct effect cannot readily be enhanced; that is to say, not without the significant expenditure of time and resources required to develop a substantially new treatment. This is not the case with the gradients of belief ingredients, however. One finds that the gradient of belief in the efficacy of the applied treatment can typically be steepened and/or made positive as a result of didactic or other persuasive interventions. This is one of the most important reasons for focusing on the role of beliefs in the treatment of depression.

Parameters of the treatment situation

There are two parameters of the treatment situation which greatly affect the extent to which belief ingredients determine treatment outcome. The first has to do with the degree of ambiguity which surrounds either or both the presenting illness and the proposed treatment. The second parameter pertains to the degree of perceptible activity which attaches to the treatment.

Ambiguity. The belief ingredients of treatment appear to enjoy special potency under conditions of ambiguity. Because ambiguity in the treatment situation often settles on the essential nature of patients' illnesses, the disease referents for those illnesses become clouded. This clouding impedes development of treatments which can directly impact the disease component of given illnesses. The treatment of
psychophysiologic disorders—fibromyalgia is an excellent example—and "mental" disorders, notably depression⁶, has been particularly affected in this adverse way.

When the disease-targeted ingredient of treatment is vitiated by ambiguity, it has the effect of amplifying the importance of the (illness-related) belief ingredients of treatment. Ambiguity heightens the ordinarily greater susceptibility of illnesses to the operation of beliefs.

Not all ambiguity about treatment stems from ambiguity about the nature of presenting illnesses, however. Ambiguity about treatment is complicated by whether a treatment has been empirically shown to lead to curative outcomes. For instance, there may be ambiguity about a treatment of demonstrated efficacy because its mechanism of action cannot be fully explained and, therefore, we cannot adequately assess whether its efficacy is related to a direct effect. On the other hand, there may be persistent ambiguity about a treatment because its efficacy has been only poorly established (empirically) or not established at all.

Perceived activity. Weil claimed that the perceived activity of treatments is a parameter which also affects the extent of the role played by beliefs in both activating and augmenting the healing process. It seems that treatments with profiles of high perceived activity tend to sequester

⁶ For an extended discussion of the ambiguity surrounding depression and its implications, see "The Cultural Determinancy Of Knowledge About Depression", pp. 136-144, in Section E of the literature review which appears in Chapter II.
treatment-related beliefs, thereby contributing to an organismic response to treatment which is strongly belief-mediated.

To illustrate this point, Weil used some anecdotes about hypodermic injections. The anecdotes depicted the behavior of individuals in extremely diverse settings. For example, Weil described rural Nigerians who lined up for an itinerant "injector" to give them costly injections of what they knew to be nothing more than three different kinds of colored water (each a different price!). He also told of a hospitalized American urban dweller who did not respond well to the direct effect of a sedative she received by injection unless the syringe which delivered the drug had a needle which was dull enough to make the shot noticeably painful to her (1983, p. 215).

Weil argued that few people are indifferent to hypodermic needles, and that by "effectively getting attention and arousing emotion" (p. 214), they induce people to attribute unusual potency to injection treatments. The anecdotes showed that belief in the efficacy of treatment by injection was the product of the peculiarly acute, perceived activity of the treatment more than it was the product of belief in the efficacy of the injected substance.

The anecdote of the American woman, however, was especially instructive for portraying both the differences and the interrelation between the biophysical activity of a
treatment and its perceived activity.\textsuperscript{7} It demonstrated that, by eliciting beliefs, the perceived activity of treatments is instrumental and, in some cases—as was true in the anecdote, necessary for potentiating the direct effects of treatments. Moreover, even though the American woman appeared to have believed in the intrinsic efficacy of the substance she received by injection, a more intense level of perceived treatment activity was required to initiate that belief as an active ingredient in the treatment-healing equation.

Treatments for depression based on the most widely prescribed class of antidepressant drugs—tricyclic antidepressants (TCAs)—provide an excellent illustration of the way in which the perceived activity of treatments is a function of a gestalt informed by illness beliefs. Depressed patients who take TCAs commonly experience a host of anticholinergic effects such as dry mouth, drowsiness, constipation, blurred vision, and sinus tachycardia (Bernstein, 1988).

When depressed patients have positive attributions about their pharmacotherapy, then, in addition to being generally well tolerated, the adverse effects (side reactions) which accompany their treatment can actually serve to bol-

\textsuperscript{7} In contrast, the anecdotal report about the rural Nigerians provided a good illustration of treatment which though physiologically inactive from an intrinsic standpoint was perceived, nevertheless, to be extremely active. It is a treatment situation which conforms to the view, held by scientific cultures, of so-called "magical" healing.
ster commitment to treatment. Under those conditions, pa­
tients perceive obnoxious side effects as evidence of the
fact that they are receiving highly active, potent treat­
ment; and those perceptions, in turn, induce greater belief
in the value of the treatment.

On the other hand, when depressed patients are either
antagonistic to their TCA drug therapy or are unconvinced of
its efficacy, then the perceived activity of the treatment,
experienced as noisome and potentially endangering symptoms,
tends to corrode whatever slim commitment they might have
had to it.\footnote{Two advocates of drug treatment for depression, Schatzberg
and Cole, astutely pointed out that physicians' beliefs and
attitudes can also prejudice patients' ability to tolerate
the expectable and noxious side effects of TCA treatment
(1986, pp. 43-44).} The perceived activity of the TCA treatment, in
this case, induces greater belief in the inefficacy of the
treatment or the unjustified health risks associated with
it. This development typically occasions noncompliance and
treatment drop-out.

Weil asserted that, as a general rule, the more active
a treatment is perceived to be, the greater will be the ef­
ficacy attributed to it (p. 227). He was careful to stress
that this general rule applies to the attributional beliefs
of practitioners as well as to those of patients. It par­
tially explains the predominance of treatments in conven­
tional Western medicine with profoundly perceptible profiles
of activity, such as treatments involving surgery, instru­
mentation, and invasive technology. These kinds of treat­
ments are able to inspire today’s allopathic physicians with enormous belief in the efficacy of their treatments—one of the three ingredients of effective treatment.

Three-way belief

In light of the power of treatments perceived as active to both induce and aggregate beliefs, Weil revised his formulation of the belief ingredients of effective treatment. He held that because treatments with high perceived activity so thoroughly involve and exploit belief-mediation, it is necessary to consider not just the belief which the treatment method inspires in patient and practitioner, but also the belief which patient and practitioner have in each other (p. 226). Weil’s ultimate pronouncement was that the interaction in the "three-way belief" which surrounds treatment could determine whether or not a treatment would promote the healing process: "If all of these [belief] factors work optimally, even procedures based on ridiculous theories can produce real cures. If they do not interact productively, even the most scientific and rational treatments may fail to cure" (pp. 226-227).

Antidepressive Personal Resources (APR)

The model of the human healing process we have been considering up this point has been a broadly generic one. Now, we will consider the human healing process from the perspective of the problem of depression, thus transforming
the generic character of the model. This move to a depression-specific model of healing is the next conceptual step in the exposition of the overall model of belief-mediated response to depression.

The generic model is transformed through the introduction of a single, depression-specific concept: antidepressive personal resources (APR). Within the previously established context of the generic healing model, the APR concept provides an answer to the central question of how belief ingredients operate in the treatment of depression.

Antidepressive personal resources are held to be any and all resources which are possibly available for depressed persons to use in responding to their depressions in an antidepressive fashion. Such resources can be located either internally or externally; they can either be material in nature or assume some energy form. Some resources can be brought under direct, voluntary, personal control, but others cannot. The following listing of some possible antidepressive personal resources should help to convey the omnibus quality of APR:

It is important to keep in mind that the model being presented assumes a preexisting condition of depression of some kind (i.e., defined either or both in terms of purely subjective, lay criteria or in terms of the standard psychiatric nosology). Therefore, APR are conceptualized as resources to be brought into play in counteracting already established depressive states. APR may or may not be relevant as resources affecting resistance and/or susceptibility to depression; a matter of clearly related interest, requiring separate investigation, however.

The resources appear in no particular order of importance.
adequate populations of (central) post-synaptic norepinephrine receptors;
cognitive-behavioral skills (including general coping and self-control skills\(^{11}\) as well as specific depression control skills\(^{12}\));
social and family supports;
money and other material resources;
balanced cycling of perisynaptic bioamine products;
"connections" and other derivatives of social status;

\(^{11}\) With regard to skills of this kind, it is useful to note that Rosenbaum (1983) formulated the concept of a basic behavioral repertoire which enables people "to cope effectively with factors that were often assumed to cause depressive or phobic behavior" (p. 55). He specified that the repertoire, which he called learned resourcefulness, "belongs to the self-system" and "constitutes a compendium of skills by which an individual controls the interfering effects that certain internal events (such as emotions, pain, or undesired thoughts) have on the smooth execution of a desired behavior" (pp. 56-57). Further, Rosenbaum stipulated that his previously developed Self-Control Schedule (1980) offered a serviceable means for assessing learned resourcefulness (in recognition of which, he changed the name of the self-control measure to the Learned Resourcefulness Scale [LR]).

\(^{12}\) Several inventories of depression-specific coping skills have been published. In one series of studies, Parker and his coworkers used original questionnaires ("Antidepressive Behavioral Measures") with depressed samples and were able to identify a set of coping behaviors relevant to depression (Parker & Brown, 1982; Parker, Brown, & Blignault, 1986). In one of the studies (1982), certain coping behaviors appeared to mediate the impact of life events commonly understood to be depressogenic stressors. Results from another study (1986) indicated that four dimensions of behavioral coping repertoires, derived from a principal components analysis, were good predictors of the course of clinical depression. In a similar vein, Kleinke (1984) used his 29-item self-report form, the Depression Coping Questionnaire, to discriminate schizophrenic, depressed and non-depressed groups according to the behavioral strategies group members said they employed in coping with depression.
communication and relationship skills;
dreams (both aspirations and REM state phenomena) and imagery (conscious and unconscious);
philosophical disposition (also known as abstract attitude);
personality factors such as self-esteem, residual self-worth, hardiness (Kobasa, 1979), need to achieve, sense of self-efficacy, independence, and internal locus of control;
good autonomic tone;
creativity;
climate;
karma;
books (especially of the self-help variety) and tapes (e.g., hypnosis, meditation, and relaxation);
authenticity;
nutritious foods;
expressive ability (verbal, manual, artistic);
hope and optimism;
character traits such as independence, initiative, social interest and "grit" (also known as will power, perseverance, intestinal fortitude, "fighting" attitude);
spsychotropic agents (especially antidepressant and anxiolytic compounds);
personal convictions (e.g., political and social) and related philosophical commitments (i.e., non-religious ones);
a vibrant reticular activating system;
overall ego strength (integrity) and isolated ego strengths (such as strong intellect and intact memory function, sound judgment, flexible and mature defense mechanisms, accurate proprioception, affective accessibility, relatedness and empathic capacity, ability to self-soothe and motivation to do so [the self-care function and healthy narcissism], sense of humor, capacity for objectivity, pain tolerance, ability to tolerate ambiguity, frustration/deprivation tolerance, ability to delay gratification, sense of autonomy and good boundary maintenance, psychological mindedness, good supply of positive introjects, patience, insight, a sense of perspective);

good endocrine and hypothalamic regulation;
temperament (e.g., need for activity and stimulation);
opportunities for pleasurable experience;
occupational and diversionary interests and abilities (including hobbies, reading, and physical exercise);
"creature comforts" (favored foods and rewarding settings);
efficient metabolism of antidepressant medications;
opose (or equanimity);
religion and religious faith or spirituality;
responsibility-taking attitude toward depression;
charm (also, personal "style");
psychotherapeutic relationships.

APR is neither quantitatively fixed nor fixed in time. APR can be expanded, for example, through education, psy-
chotherapy, new relationships, enhanced fitness, and diet. It can also contract, for example, as the result of demoralization, acute illness (or immune incompetence of some kind), cognitive impairment, and losses in any number of spheres. In addition, the disposition of the APR which is available to a person at any given moment is unstable, constantly shifting to reflect ongoing changes in her or his internal environment and external circumstances.

A Black Box Variable

As a concept, APR is a construct of convenience intended to serve the overall response-to-depression model in the manner of a "black box" variable. As with other such variables, APR is so named in the dual sense that, like a black box, its general existence can be accounted for with more than reasonable certainty, while, for the sake of argument, its precise nature and exact contents remain unspecified. There are several reasons for representing antidepressive personal resources in this way.

13 Like other black box variables in the behavioral sciences, APR objectifies phenomena which are (for the most part) not directly observable but which have effects that are convincingly evident.

14 In a 1983 article by Wheaton, the term "personal resources" was used to imply the operation of a mediating personality variable (p. 210) of something like the black box type. Although the idea of antidepressive personal resources is quite distinct from Wheaton's idea of personal resources, the author would like to acknowledge that it was the conceptual kernel from which the idea of APR was developed.
As the partial listing (above) of possible antidepressive personal resources suggests, APR represents a highly heterogeneous class of phenomena with so many different putative mechanisms of action that its operational profile is quite diffuse. However, as the black box variable "APR", those separate phenomena assume the existence of a uniform, collective variable having clearly defined operational properties. What is more, APR is able to display the way that antidepressive personal resources operate as a seamless whole within the flow of the overall model. Attention is, thus, focused on the effects achieved when APR is exploited, limiting—to the extent possible—reductionist speculation about individual constituent resources and their respective inner mechanisms.

Further, as a variable which subsumes all types of resources—biological, psychological, and social—APR recapitulates the idea of totality of integrated response, previously expressed in the concept of an arc of organismic responsivity. Where the arc of organismic responsivity concept elucidates the universal manner in which individuals respond to depression, the APR concept represents the idiosyncratic content of their responses.

APR and a Depression-specific Model of Healing

The APR concept makes it possible to recast the generic healing model in terms of depression: When a depressed person responds to the totality of his or her depressed situa-
tion, it is done in an (integrated) organismic fashion, using the totality of resources available (at the time) for doing so. All outcomes in the therapeutic response to depression, whether self- or other-directed, are a product of the exploitation of APR, i.e., the number and kind of resources and the degree to which they are exploited. This highlights the valuable transtheoretical nature of the APR concept. APR is posited to be the source of all treatment response, irrespective of the presumed etiology of any given depression and irrespective of the ideological character of any applied treatment modalities.

Taking the unique characteristics of every situation into account, it can be said that optimum exploitation of APR yields optimum antidepressive response. It must be recognized, however, that in some situations, even optimum exploitation of APR will not achieve a desired outcome, i.e., diminution of depressive symptoms or full recovery. As with other illnesses, healing from depression does not occur unless antidepressive response is sufficiently sustained or of sufficient magnitude to surpass the healing threshold.

Sub-threshold responses notwithstanding, it is assumed that whenever APR is mobilized there will be some corresponding therapeutic gain. For instance, it seems probable that, in cases of sub-threshold response, the mobilization of APR has a priming effect. The organism is readied for follow-up responses, its enhanced receptivity lowering the healing threshold. In other respects, when a response fails
to attain the healing threshold, passage of time and/or strategies which increase the number and kind of resources which are brought into the arc of an organism's response are likely to boost subsequent antidepressive responses over the threshold for healing.

It is hoped that the foregoing discussion has succeeded in giving substantive definition to APR as the raw "stuff" of antidepressive response and the basic unit of a model of the healing process in depression. It is further hoped that the discussion has enabled readers to conclude that, with regard to the treatment of depression, belief ingredients exert their influence in terms of APR. In other words, belief ingredients operate on APR, mediating the mobilization and use of resources available for antidepressive response.

In the next section, we will look at how a number of cognitive factors affect the way in which beliefs either potentiate or suppress APR. We will also examine how those cognitive factors affect the way in which beliefs modulate the utilization of APR, ultimately contributing to the elaboration of two distinctive paradigms of antidepressive response.

Appraising The Controllability Of Depression:
The Core Of The (Overall) Model Of Response To Depression

An interplay of cognitive processes, including both (illness) beliefs about depression and beliefs about self-efficacy, comprises the core of the overall model being pre-
sented here. Centralmost among these processes is a multi-
level, multistage appraisal of the controllability of de-
pression. Where APR is the basic unit of the overall model,
the fundamental theoretical principle of the model is that
appraisals of the controllability of depression govern the
mobilization of antidepressive response and with it, the ex-
ploitation of antidepressive personal resources.

In this section, full descriptions are offered of the
appraisal process which is hypothesized to occur at four
distinct levels. The descriptions are geared towards re-
vealing whether the cognitive process of appraising de-
pression controllability quickens or dampens antidepressive
response initiative. But before proceeding to these de-
scriptions, we will take up an important clarification.

The Origin and Ideological Scaling of the
Perceived Controllability of Depression

Due to the central place which the perceived controlla-
bility of depression occupies in the overall model, it is
appropriate to identify the origin of the perception and how
it is formed. The author maintains that depression control-
lability is an embedded dimension of each of the beliefs in
a person's network of propositions about the etiology and
treatment of depression. In other words, reflection on the
controllability of depression is an implicit feature of the
way in which individuals conceptualize depression; and, it
is a salient source of the meaning which depression holds
for them.
Individuals achieve a summary appraisal of the controllability of depression which they unconsciously distill from the full complement of their isolated illness beliefs. This summary appraisal exists within them as an internalized percept. When properly cued, however, individuals are capable of consciously accessing these internalized percepts as both illness meaning and isolated illness beliefs.\(^1^5\)

In the exposition which follows, it will be useful to recall that the author proposed\(^1^6\) that the dimension of perceived depression controllability can be meaningfully scaled on two continuua of ideological belief orientation. When illness beliefs are primarily biomedical in orientation, depression is perceived as being not personally controllable. Contrariwise, when illness beliefs are primarily psychosocial in orientation, depression is perceived as a condition which is most definitely open to personal control.

**Levels of Appraisal**

In the paragraphs below, four hypothesized levels of cognitive appraisal are described\(^1^7\). The cognitive process which is modeled is a sequential one, with each level of appraisal building conceptually on its predecessor(s).

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\(^{15}\) This is the basis of the assessment strategy employed in the BADIT, a strategy involving the direct measurement of illness beliefs.

\(^{16}\) See for example, pp. 197 ff. in Section E of the literature review which appears in Chapter II.

\(^{17}\) These levels are represented in Figure 1 on p. 277.
process which takes place at each level, however, is essentially same.

In practically every instance, the appraisal process is an internalized one and results in a judgment regarding the controllability of depression. The description of the process at each level, therefore, fixes on a particular internalized percept of the controllability of depression. The first three levels of appraisal are conceptualized in terms of Bandura's self-efficacy theory as it applies to the situation of a depressed person's gestation of a response to his or her depression.

**Level I: The universal possibility of control**

The question that exemplifies the initial appraisal process is: "Within my frame of cultural reference, is the nature of depression such that it is, at all, a controllable condition, i.e., controllable by any means employed by anyone?"

This appraisal is 'universal' in the formal sense that it refers to the universal case. That is, it establishes, in categorical fashion, whether the control of depression is a legitimate possibility within the confines of the appraiser's cultural context. For this reason, all sequences begin with appraising the controllability of depression at the universal level.

According to self-efficacy theory, cognitive appraisal at the universal level revolves around a reasoned expecta-
tion of what the outcome of a contemplated behavior (or behavioral program) to control depression would likely be if enacted by anyone. This kind of reasoned expectation is called an outcome expectancy, and it is arrived at through assessing the "objective" properties of the situation in which contemplated behavior is to be enacted and the goal toward which it is directed--in this case, the control of depression. As such, appraisal at this first level comments on the nature of depression, resulting in a judgment about its controllability. It poses the question: "What is the likelihood that any attempts to control depression, undertaken by anyone, would enjoy successful outcomes?"

**Level II: Control through direct human agency**

At the second level, the appraisal process narrows to a consideration of whether depression is controllable by persons. The question that exemplifies this process is: "Within my frame of cultural reference, is the nature of depression such that it is a condition which can be directly controlled through human agency?"

This level of appraisal has special significance for the treatment of depression. For the most part, the field of choices in treatment for depression is divided between pharmacotherapy and psychotherapy. A sequence in which an appraisal (Level I) that depression is controllable is followed by an appraisal (Level II) that it is not directly controllable via human striving, results in a percep of
controllability most logically suited to the employment of drug and other somatic treatments. This topic will be taken up at greater length, below, when the ramifications of various pathways of appraisal and response are examined.

Additionally, the second level of appraisal introduces the possibility of another dimension coming into play in the process of forming a percept of depression controllability. It is the personality-related dimension of locus of control. For example, one might reasonably expect that a person with a generalized and externally located sense of control would be apt to perceive that the control of depression lies beyond human intervention, that is, that depression is only externally controllable. Correspondingly, one might anticipate the opposite to be true of a person with an internally located sense of control.

In terms of the self-efficacy paradigm, this level of human-personal appraisal further refines the parameters of the behavioral arena, shaping a more pertinent outcome expectancy. The process poses the question: "If a person--

18 In a 1977 presentation of self-efficacy theory, Bandura attempted to graphically illustrate the difference between individuals’ expectations ("estimates") about the outcome of certain behaviors and individuals’ expectations ("convictions") about their efficacy at executing them successfully. To do this, he used a figure which showed efficacy expectations preceding behavior, and outcome expectations following behavior and preceding outcome (1977a, p. 193). Bandura’s emphasis was clearly on separating the two types of expectations because, in the balance of that 1977 article and in subsequent writing on self-efficacy (e.g., 1982, 1984), he made no mention of the temporal sequencing represented in the figure. This lack of comment would suggest that the sequencing implied in the figure was wholly immaterial to the self-efficacy paradigm. The purpose of
any person—were to attempt to bring his or her depression under control through engaging in specific antidepressive activities, what is the likelihood that those depression-control behaviors would meet with success?"

**Level III: The self-referent prospect of personal control**

The third level of appraisal is the most critical for the elicitation of antidepressive response and its related consequences. At the third level, the appraisal process becomes self-referent, and in some respects, even self-confrontive.

Depression controllability at this level is an inescapably egocentric matter, as the question that exemplifies this appraisal process indicates: "Given that I believe that it is possible for humans, in general, to achieve some meaningful degree of control over depression, is it possible for me—with my abilities and resources—to achieve that control?" This kind of appraisal leads to the formation of the most penetrating and personally relevant percept of illness controllability in depression.

It should be plain that this appraisal of the prospect of personal control, being a self-referent one, consists more of an appraisal of self-efficacy than an appraisal of

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this clarification is to point out that, as outcome expectancies, Level I and Level II percepts of depression controllability are hypothesized to precede (not follow) any behavior which would be forthcoming as part of an antidepressive response—a sequence demanded by their very function as conditioners of antidepressive response!
the nature of depression. The process results in, what Bandura calls, an **efficacy cognition** (as opposed to an outcome expectancy), as the question it poses reveals: "Am I likely to be effective at controlling my depression through engaging in specific antidepressive activities which are regarded to be generally effective in controlling depression?"

**Level IV: Responsibility for control**

The process of appraisal which takes place at the fourth level is of a completely different order than those occurring at the three preceding levels. Level IV appraisals complete the full appraisal sequence, and are really only germane to individuals who are first convinced of their personal ability to exert some meaningful degree of control over their depression.

The cognitive process at Level IV consists of an appraisal to determine where the locus of responsibility for controlling depression lies. The question that exemplifies this process is: "Given that the nature of depression is such that it is personally controllable, and, I believe, personally controllable by me, who is responsible for arranging for and/or carrying out that control?"

Brickman et al. (1982) proposed that this kind of appraisal is a crucial motivational element in the generation of human coping responses. In their seminal article, Brickman et al. outlined a system for studying the implications of helping and coping behavior by analyzing individu-
als' attributions about the locus of responsibility for their problems separately from their attributions about the locus of responsibility for the solutions to those problems? The appraisal process represented at the fourth level, however, is concerned only with the attribution of responsibility for solutions to the problem condition of depression, expressed in the language of control.

Although it diverges from the three other appraisal processes, this fourth level of appraisal is included, in part, in order to insure that Brickman et al.'s valuable system of thinking about helping and coping (i.e., treatment) relationships would find clear representation in the author's model of belief-mediated response to depression.

In part, the appraisal of responsibility for control is included because it represents another level of appraisal--as with Level II and the locus of control--which incorporates the possible operation of a personality variable. Specifically, the author hypothesizes that a variable of existential derivation, rooted in personality and manifested in a responsibility-taking attitude, has a modulating influence on the exploitation of antidepressive personal resources.

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19 For a detailed discussion of this important work, the reader is referred to pp. 113-122 in Section D of the literature review which appears in Chapter II.
Utilization of Antidepressive Personal Resources

Now that we have achieved an understanding of the central appraisal process which determines the mobilization of antidepressive response, we turn to an examination of how antidepressive personal resources (APR) are utilized, and to an examination of some of the factors relevant to the exploitation of those resources.

Modes of Utilization

It is, perhaps, best to begin by clarifying that there are two modes in which APR is utilized, a conscious one and an unconscious one. In the unconscious mode, the utilization of APR is completed without the accompaniment of any sort of mediating or intervening cognitive process. In this mode, APR is exploited in something like the manner of a reflex. In the conscious mode, the utilization of APR is often directed by an executive cognitive process; minimally, it is accompanied by a related and parallel cognitive process. In every respect, the conscious mode of APR use resembles other instances of goal-directed, intentional behavior.

In some cases, the mode of APR utilization will be determined by the nature of the resources mobilized in the antidepressive response. For instance, resources pertaining to the production, uptake, and metabolism of centrally circulating bioamines are not likely to come under conscious control and, therefore, will not usually be utilized in a
conscious mode\textsuperscript{20}. On the other hand, material resources and social supports require some manner of planful reflection for their exploitation, which makes them resources only likely to be used in a conscious mode. In a large number of instances, the dominant mode of APR utilization is determined by the unique characteristics of an individual's situation and by his or her motivational state.

Two Paradigms Of APR Use

In order to convey some of the fuller clinical meaning associated with both modes of utilization, the next section will be devoted to describing two paradigms of APR use which pertain to the treatment of depression. Up until this point, the critical role played by cognitive factors (mainly, beliefs) in the model has been portrayed in a somewhat mechanistic fashion. The intention here is to project a more synthesized view of beliefs and supplemental clinical factors and the kinds of APR use they conjointly determine.

\textsuperscript{20} Although, it needs to be added that there are adherents of a radical, integrated body-mind approach to healing who claim that all of the body's physiological processes are amenable to the influence of consciously directed mental processes. Followers of this approach might press the point that all APR could potentially be exploited in the conscious mode, even if the ultimate agency were an unconscious mental process such as hypnosis or dream programming. Adherents of this radical psychosomaticism have enjoyed a sizeable measure of success in publicizing practices aimed at gaining conscious influence over bodily processes customarily regarded as inaccessible to voluntary control. These practices often involve meditation techniques consisting of relaxation paired with guided imagery. One of the most popular of these practices, for instance, is the Simonton anticancer program (Simonton, Matthews-Simonton, & Creighton, 1978).
Both paradigms are exemplars of antidepressive response, but each is dominated by a different factor of belief, i.e., the utilization of APR is mediated differently. The difference between the paradigms roughly corresponds to the distinction which was drawn by British philosopher H. H. Price, between "belief 'in'" and "belief 'that'" (1969).

In one paradigm, belief in is expressed as a kind of faith in either or both the treatment provider and the treatment; it is typically unreflected upon. In the other paradigm, belief that assumes the form of knowledge about depression and treatments for it; it is expressed through illness beliefs.

As the ensuing descriptions will reveal, belief in has a clear cognitive basis in belief that. However, these belief factors are associated with such functionally different styles of utilizing APR that they merit separate attention.

The mesmeric paradigm

The first paradigm to be considered takes in the antidepressive response which is mobilized by a belief in factor, and exemplifies an unconscious utilization of APR. Belief in is the kind of belief which Weil (1983) propounded as an ingredient of effective treatment in his general schema of innate human healing. In that schema, parts of which were presented earlier, belief ingredients of treatment encompassed (a) the patient's belief in the treatment, (b) the practitioner's belief in the treatment, and (c) the
patient’s and practitioner’s respective belief in each other.

In recognition of the unconscious, trance-like quality of healing which occurs with this kind of APR use, the paradigm is named after the most famous of the "magnetic cures" which were popular in late eighteenth century Europe (see DeSaussure, 1969). Various applications of the principles of animal magnetism had a forceful effect on the development of modern psychiatry (Ehrenwald, 1976), and the mesmeric label helps to expose the historical roots of the belief in response paradigm.²¹

Congruence

The factor which motivates a mesmeric use of APR is congruence—the congruence between a depressed person’s internalized beliefs about what is the most effective treatment for his or her illness, and his or her perceptions of the kind of treatment situation in which they find themselves. (An important constituent of this treatment congruence is the degree to which patient and practitioner are congruent, psychologically and ideologically.)

²¹ The author wishes to acknowledge that the idea of a mesmeric paradigm of psychiatric treatment (which exists in opposition to a rationally-guided paradigm) was derived from a thesis presented by Edward M. Brown, M.D. of Providence, Rhode Island (ca. 1980). Brown’s thesis was that the epochal developments which transformed psychiatry at the turn of the twentieth century were dialectical in nature. He argued that those developments could best be conceptualized in terms of the differentiation of a new and rationally-guided form of medical treatment, psychoanalysis, from existing forms of mesmeric-hypnotic treatment.
The more congruent treatment conditions are with individuals' internalized beliefs, the further those beliefs are pushed out of awareness, and the more that antidepressive treatment response involves a purely unconscious utilization of APR. In general, it is hypothesized that the greater the congruence which is experienced, the greater the faith (i.e., belief) in the treatment, and the more extensive the exploitation of APR.

To gain an alternate view of congruence, let us consider that the mesmeric paradigm represents a trance-like form of healing. The induction of that healing trance is dependent on achieving congruence. In concrete terms, trance is induced by a felicitous combination and arrangement of elements in the treatment ecology which cue belief in the person of the treatment provider and in his or her treatment methods.

There are a multitude of sources in every treatment ecology for cueing belief. These sources range from props and other cultural accoutrements related to the healing motif (e.g., containers for collecting urine specimens, busts of Freud, prescription pads, white coats, bookshelves filled with scholarly tomes and scientific journals, prominently displayed diplomas, state licences, and guild citations, etc.) to aspects of social organization and individual conduct (e.g., dominance rituals, ethnic and class affinity, professional demeanor, etc.).
Some of these sources are highly invested with potent symbolism which acts upon individuals unconsciously. In general, the more replete the treatment ecology is with features which cue belief in treatment in a uniform direction, the stronger trance induction will be, which, in turn, translates into a greater, unconscious exploitation of APR.

The strongest states of belief in treatment are created when all expectations are met, on both conscious and unconscious levels—no anticipated element is missing and no discordant one is present. That degree of congruence is rare, however, as sources of incongruity are also plentiful in treatment ecologies. Many of these sources of incongruity can be selectively attended to, but others are so intrusive or so disturbingly discrepant that they can neither be overlooked nor suppressed.

The salience of discrepant elements will be determined by an idiosyncratic mixture of cultural standards and the personally symbolic. Sometimes, belief will be miscued by a consciously observed detail which is noticed at once and has an immediate impact, such as a practitioner’s snoring or poor hygiene, or a local newspaper account about the practitioner in connection with malpractice litigation being brought by an obviously wronged former patient. Sometimes, belief will be miscued by a subliminal element which works over time, such as a practitioner’s lack of commitment to the patient, or lack of belief in the treatment—aspects of
behavior which are often also out of the practitioner's awareness.

In any event, egregious violations of expectation cause a miscueing of belief which breaks the spell of the healing trance. Surprisingly, treatment often continues despite the waning or suspension of congruence, but the unconscious exploitation of APR is vitiated.

The placebo response is the prototype of the mesmeric paradigm. The treatment effect achieved by placebo responding is mediated solely by an individual's belief in the efficacy of the treatment administered to them. Moreover, the utilization of personal resources which is mobilized by belief in transpires automatically; it involves no conscious deployment of personal resources or any other form of conscious self-enlistment.

The conative paradigm

A second paradigm of APR use subsumes the antidepressive response which is mobilized by propositional beliefs (belief that)—most prominent of which are illness beliefs about depression—and exemplifies a conscious utilization of APR. It is called 'conative' in recognition of the striving which is the essence of the response. In the conative paradigm, the exploitation of APR is accomplished through the planful initiation, monitoring, and effortful execution of antidepressive behavior.
Two interrelated aspects of the conscious self are essential to a conative exploitation of APR. The first is predicated on a certain level of differentiated self-awareness. It is the depressed person’s cognitive organization of, and introspective accessibility to, the different kinds of resources potentially available to him or her for effectively dealing with depression. The other aspect of the conscious self upon which a conative use of APR depends is a posture of self-enlistment and commanding intentionality. The conative paradigm is epitomized in the integrated expression of these two aspects of self within the depressed person; namely, in the functioning of a consistent and vital executive self capable of carrying out the will to recover.

Belief orientation

The primary factor which motivates a conative use of APR is the ideological orientation of an individual’s illness beliefs about depression (belief orientation), i.e., the extent to which those beliefs confirm the meaningfulness of personal striving to control depression.

The less equivocal individuals’ beliefs are about the possibility of controlling depression through self-directed efforts, the more dynamic, sweeping, and persistent will be their conscious utilization of APR. On the other hand, when individuals believe that the nature of depression is such that they cannot control it, to any meaningful degree,
through their personal striving, then there is practically no room for a conatively-styled antidepressive response.

There are at least two other varieties of accessory beliefs that which modulate, if not actually motivate, the conative use of APR. They are (a) the self-referent belief that one is competent to strive for control of one's depression in way which will be effective, and (b) the attributational belief that one is responsible for striving to control one's depression. These were discussed before in the exposition of the central appraisal process.

Self-control is prototypic of the conative paradigm. It incorporates both the conscious motive to be "in control" and the conscious direction of cognitive and motor programs for achieving that level of self-regulation which denotes effective control.

Two major psychological traditions of conceptualizing self-control come together, in complementary fashion, to convey the scope of the conative paradigm. One is the tradition of personality theory which postulates that self-control behavior is driven by anal characteristics, and by desires for personal empowerment and a sense of effectance. The other tradition, which employs cognitive command and cybernetic models, tends to portray self-control as conscious, information-driven, regulatory behavior.22

22 See Rosenbaum (in press) for an inventive thesis which integrates the two traditions.
As will be explicitly detailed in Part II of this dissertation, the BADIT was designed to measure illness belief orientation. As such, it provides an assessment of the degree to which a given individual is likely to engage in a conative use of APR.  

Maximizing Antidepressive Response

The mesmeric and conative paradigms were presented as separate and distinct patterns of utilizing APR, which they are. The separate attention which the two paradigms received here, however, was not intended to imply either (a) that they operate in mutual exclusion to one another, or (b) that paradigmatic responses are treatment mode specific.

Due to the relative stability of illness belief orientation and the stability of relevant dispositional variables, people generally have response proclivities which cause them to favor one paradigm of APR use over another. But such response proclivities are counterbalanced by the rich "texture" of treatment ecologies.

Treatment situations are usually so densely variegated and multilayered that they actually induce individuals to utilize their APR in both an unconscious and conscious manner. What is more, multimodal APR use is supported by the organism's inclination to respond in an integrated manner.

23 It is worth noting here that by using the BADIT to compare the respective illness belief orientations of practitioner and patient, one can gain at least one good indication of the degree of congruence upon which a mesmeric use of APR depends.
The net result of these countervailing influences is that people typically end up engaging in highly individualized yet composite styles of antidepressive response in which they utilize some of their APR in a mesmeric fashion and some in a conative fashion. Maximum antidepressive response, a response dependent on both paradigms of APR use, lies down this path of natural tendency.

While it may seem that, structurally, the mesmeric paradigm is peculiar to biological treatment methods, and the conative paradigm is peculiar to psychological treatment methods, that is not at all the case. Both paradigms of APR use operate independently of whatever treatment modality is employed. The mesmeric paradigm is no less suited to the psychotherapeutic situation than the conative paradigm is to the pharmacotherapeutic one.

Psychotherapy, for example, promotes a mesmeric use of APR in the form of general faith in the method of treatment, positive attributions about the kinds of professionals who conduct the treatment, positive transference to the person of the therapist, and a nonverbal therapeutic alliance, in addition to any number of "nonspecific" effects which have been identified with the psychotherapeutic process (see for instance, Wilkins, 1984, 1985).

Similarly, antidepressant drug therapy provides ample opportunities for depressed patients to use their APR conatively through numerous activities related directly to treatment, such as scrupulous adherence to the medication
regimen and avoidance of possibly untoward drug interac-
tions (e.g., with alcohol), vigilance about target symp-
toms\textsuperscript{25}, forbearance of disruptive drug side effects, and self-education about the drug treatment of depression. Patients in pharmacotherapy also have opportunities to cona-
tively exploit their APR by participating in activities which are adjunctive to treatment, such as exercise and stress management programs and peer support groups like the Manic-Depressive Depressive Association.

Taken together, the preceding qualifications help to definitively establish the principle of optimal treatment response, namely, that optimal treatment response is only achievable through the coupling of mesmeric and conative styles of exploiting APR. Toward the end of coaxing the natural tendency to composite response style and of assuring an optimal response, it follows that the most basic (and initial) task of treatment providers is to prepare treat-
ments which are (a) most matched to patients' illness be-
liefs, i.e., to their belief orientations, and (b) are ar-
ranged to be as congruent as possible with patients' less formulized beliefs and expectations.

\textsuperscript{24} This is especially true for patients on MAO-inhibiting drugs who must adhere to tyramine-free diets.

\textsuperscript{25} This may include keeping a diary or other record keeping.
At this point, the exposition of the formal model has been, essentially, completed with explications of: (a) APR as the all-purpose quantum of antidepressive response, (b) the appraisal of depression controllability as the critical factor which either releases or inhibits the exploitation of APR, and (c) paradigms of APR use as integrated examples of how antidepressive response actually proceeds. This section is taken up with the presentation of an extended and somewhat elaborate illustration of the overall response-to-depression model. The chief purpose of the illustration is to demonstrate the applied clinical value of the model by using it as a framework for elucidating some of the behavioral response implications of different appraisals of the controllability of depression.

The illustration focuses on how people respond to depression once they have appraised its controllability. Accordingly, it is comprised of full descriptions of nine prototypic responses to depression which follow from four different sequences of belief about the controllability of depression. These are presented schematically in a figure which appears on p. 277.

Nearly all of the descriptions in the illustration devolve from an analysis of a number of instances in which depression is perceived to be uncontrollable. Before turning directly to the illustration, we will first consider some
aspects of the analysis which was instrumental in helping to render the descriptions. The analysis was appropriated from Bandura's writing on futility.

**Futility: When Depression is Perceived to be Uncontrollable**

Bandura labeled the differentiated condition associated with perceived self-inefficacy, futility. Further, he delineated two separate sources of that futility, each of which, he asserted, gives rise to a qualitatively distinct state of futility (1982, pp. 140-141).²⁶

One source of futility was identified as "outcome-based", arising when individuals perceive that, despite their competencies, an unresponsive environment or unyielding circumstances keep them (and comparative others) from achieving a particular outcome. Bandura indicated that this kind of futility leads to resignation and makes people apathetic.

The second source of futility Bandura identified as "efficacy-based". It arises when individuals judge their inability to achieve a particular outcome--one achievable by comparative others--as stemming from their personal lack of the competencies required to be effective in that situation. Bandura indicated that this kind of futility leads to self-devaluation and makes people despondent. Additionally, he

²⁶ For a more general treatment of this subject, the reader is referred to Section F of the literature review, entitled "Self-Efficacy Theory: Beliefs As Behavioral Expectancies"; it appears in Chapter II and begins on p. 212.
argued that personal failure to achieve a rewarding and desired outcome due to perceived inefficacy, as opposed to failure to ward off an aversive one, is most apt to produce despondency.

Seeking to pursue a line of futility analysis similar to that Bandura had pursued with perceived inefficacy, the author adopted Bandura’s concept of futility and modified it for use in analyzing the qualitatively distinct states which arise from each of three separate sequences\(^1\) of appraisal in which depression is perceived to be uncontrollable. In the context of the overall model, futility is defined as a consequence of the perceived uncontrollability of depression, not as a consequence of perceived inefficacy.

The fact that the overall model revolves around a multilevel, multistage process of appraisal means that there are more varieties of futility to be discerned than was true with Bandura’s analysis of perceived inefficacy. For the most part, however, the futility analysis which drives the illustration of the overall model is consumed with distinguishing between the perception that depression is uncontrollable because that is the nature of depression (Level I and II appraisals), and the perception that depression is uncontrollable by dint of personal inadequacy (a Level III appraisal). The first perception corresponds to outcome-based futility and the second, to efficacy-based futility.

\(^{27}\) Futility is not an outcome of the Level IV (Responsibility for Control) appraisal sequence.
Although futility is hypothesized as causative of different emotional states, in the language of self-efficacy the experience of futility is represented in cognitive terms, as an appraisal or a judgment, rather than as an emotional state. For this added reason, the author chose to represent the perceived uncontrollability of depression as futility. It preserves the cognitive sense intended by Bandura, avoiding the emotional connotations of a global personal fate associated, for instance, with the term 'helplessness'.

Specifically, the author eschewed use of the term 'helplessness', with its prominent connections to depression, in order to preclude the association of the perceived uncontrollability of depression with either subjective responses to futility (e.g., helplessness, hopelessness) which are taken to be cardinal symptoms of clinical depression, or with the work of Seligman and his colleagues.

Pathways Of Appraisal And Response

As has been previously noted, the appraisal of depression controllability involves a complex, multilayered cognitive process. According to the model, the end point of that appraisal process is a consolidated percept of illness

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28 That is, the learned helplessness theory of depression (Seligman, 1974) and the reformulation of that theory as an attributional model of depression (Abramson, Seligman, & Teasdale, 1978). For a brief description of this work, see pp. 15-17, this dissertation.
LEVELS OF APPRAISAL

I
UNIVERSAL
(Outcome Expectancy)

II
HUMAN-PERSONAL
(Outcome Expectancy)

III
SELF-REFERENT
(Efficacy Expectancy)

IV
RESPONSIBILITY FOR SOLUTIONS

Is the nature of depression such that it's controllable by anyone, employing any means?

Yes

1. PLUS-TYPE

No

2. MINUS-TYPE

Can people control depression directly through their own efforts?

Yes

3. ACTIVE-TYPE

No

4. APATHETIC-TYPE

Is it possible for me to achieve direct personal control over depression?

Proxy Control

5. POWERFUL OTHERS

No

6. DIFFUSED SELF-DISPARAGEMENT (comparative)

Yes

7. DESPONDENT SELF-DISPARAGEMENT (comparative)

Am I responsible for achieving direct control over my depression?

Yes

8. SELF-RESPONSIBLE CONTROL

No

9. OTHER-RESPONSIBLE CONTROL

Figure 1. Four sequences of response to the appraised controllability of depression; nine pathways of appraisal and response.
controllability which is the beginning point of response to illness.

The model generates four key sequences of appraisal, with prototypic patterns of response flowing from each appraisal. In this illustration, descriptions of the nine response pathways are grouped with the sequences of appraisal which evoke them (see Figure 1, on previous page). Because appraisal of depression controllability is conceptualized as a process which progresses through multiple levels (a flow-through model), the sequences will be presented in increasing order of their affirmation of controllability, with the sequence admitting to no possibility of control presented first.

Each pattern of response will be described in terms of its effect on the initial use of APR. The patterns will also be characterized in terms of (a) paradigms of APR use, (b) the kinds of attributions that typical responders are likely to make about positive changes in their depressed conditions\textsuperscript{29}, and (c) the implications of the response for responders' self-esteem.

The Resignation Sequence: No possibility of control

This is the most truncated sequence—in fact, it is not, strictly speaking, a "sequence" because the appraisal

\textsuperscript{29} Readers may recall the discussion, which appeared in Section D of the literature review in Chapter II, in which one of the key consequences of beliefs was cited as being their influence on the attribution of behavioral change.
process terminates before it can segue to another level of appraisal. This position (rather than sequence) represents a Level I appraisal that, on a universally considered basis, depression is wholly uncontrollable. It defines, in the purest manner, the relationship between the perceived uncontrollability of depression and futility: any plan to respond to depression with the aim of controlling it is utterly futile. This is outcome-based futility and it promotes resignation. Nevertheless, this percept of uncontrollability allows for two prototypic responses. One, I have called the "Plus-type", and the other, the "Minus-type".

The Plus-type response

The essence of the Plus-type response is surrender. In this position, perceiving that one is under the influence of a completely uncontrollable condition leads to resignation, but a resignation of acceptance not defeat. For some, a quasi-spiritual or mystical element may be present in their attributions of absolute uncontrollability, attributions suggesting the workings of a supreme, if not an actually benign, power. For these people, surrender to that power brings serenity--the kind of serenity which is a desideratum of the Alcoholics Anonymous recovery program. For others, their acceptance, being thoroughly rational, has the character of stoicism.

In either case, the perception of total illness uncontrollability unburdens Plus-type responders of any obliga-
tion to act. They feel little or no sense of ownership of their depressions and consequently, have no sense of responsibility for doing anything about them. This lack of responsibility is experienced as a sense of freedom and emotional weightlessness that is likely to translate into an initial—though probably minimal—and mesmeric use of APR.

If this type of responder experiences an improvement in his or her depressed condition, it is attributed to chance or something like divine (or cosmic) intervention. In this regard, one expects that the stoic responder’s attributions for positive changes will be informed by a semblance of scientific explanation. Because a perception of the blanket uncontrollability of depression bespeaks such personal detachment, this pattern of response is unlikely to have any effect on self-esteem.

The Minus-type response

This pattern of response is pretty much the "flip side", in affective terms, of the Plus-type. The two types share in the same perception of total illness uncontrollability, but Minus-type responders react to that perception in a markedly different manner from Plus-type responders.

Like figures in a Greek tragedy, Minus-type responders respond as if abandoned to a mythic fate of desperate, unrelied, and impotent suffering. Minus-type responders perceive the massive uncontrollability of their illness in a
highly personalized way and it worsens their depression. Clinically, one expects to find this pattern of response to be prevalent among individuals whose depressions are dominated by guilt feelings and guilt-related ideation.

It is hypothesized that the increase in (depressive) symptom severity which results from Minus-type responders' Level I appraisals of illness uncontrollability leads, initially, to an acute dip in APR. If there is spontaneous amelioration of the depressed condition, these responders tend to attribute the changes in a manner which rationalizes their valued illusions about the fickleness of chance or the operation of personified and superstitiously regarded principles of fate.

As with the Plus-type response, because depression is perceived to be so absolutely uncontrollable, the Minus-type response has no significant effect upon self-esteem in the majority of cases. There are a number of Minus-type responders, however, who undoubtedly come to feel that if they were "better" or more "deserving" people, they would not be afflicted by such an uncontrollable illness. For this latter group, the Minus-type pattern of response will necessarily occasion a transient (illness-dependent) drop in self-esteem.
The Nonhuman Agency Sequence: The possibility of only external control

With this sequence, the gateway of beliefs opens up, admitting the possibility of some degree of illness control. The sequence begins with a Level I appraisal that, on a universally considered basis, depression is controllable. It is followed by a Level II appraisal which places a condition on that perceived controllability, namely, that depression is ultimately only controllable through nonhuman agency.

In the great majority of cases, the operative assumption which underlies the sequence that terminates in a Level II appraisal of uncontrollability is that the experience of depression is the immediate and invariable result of a biochemical dysfunction in the central nervous system. According to these beliefs, therefore, the control of depression cannot be directly achieved through human striving, but only through employment of appropriate biological means. The practical, i.e., clinical, implication of this sequence of beliefs is unmistakable: Depression is viewed as controllable solely through the use of drug and other somatic therapies.

Although the implication of this sequence is as apparent as it is, the perception of limited controllability is still capable of prompting more than one type of response. And, it is at this point in the examination of the sequences that we begin to see the effect which the interaction among the network of an individuals' illness beliefs has on the
elicitation of a response to depression. In this case, the
effect of the cognitive interaction spells the difference
between evoking a response pattern of outcome-based futility
versus one of vital antidepressive activity.

The Active-type response

The active-type responder comes in two varieties, both
of which embody a constructive, action-oriented response,
designed to achieve as much control over depression as is
possible.

One variety of active responders are undaunted pragmatists, unimpaired by their perception that depression is
only partly controllable. Their appraisal puts them in
something of a default position with respect to the options
available for depression control, but these people have no
ideological investments to constrain their search for solu­
tions to their problem of depression.

The other variety of active responders are ideologi­
cally motivated. Their perception that depression is only
controllable through nonhuman agencies is perfectly consis­
tent with their commitment to an encompassing biomedical
orientation. In fact, the strong, sometimes dogmatic, be­
lief that depression is "nothing more than" a disease ("a
biochemical imbalance") often dictates their somewhat mili­
tant and singleminded pursuit of the latest drug treatments
for their depression.
With both varieties of active response, the use of APR is almost exclusively mesmeric and involves only a partial exploitation of resources. APR use with the Active-type response is conative only in so far as it necessitates the conscious marshalling of those resources involved in adherence to the pharmacotherapeutic or somatotherapeutic regimen. APR is only partially exploited with this response pattern because it relies so heavily on a mesmeric style, leaving untapped a significant realm of resources relevant to self-control and other psychological modes of treatment for depression.

Believing that they are unable to exert control over depression, active-type responders attribute symptom improvement—when it occurs—to the efficacy of drug or other somatic interventions. In what amounts to a circular confirmation of their beliefs, the ideologically motivated variety of responders eagerly attribute positive changes in their condition to drug activity (etc.). The attribution of change associated with both varieties of this pattern of response faithfully recapitulates the dominant American view that the power to heal resides neither within the affected individual nor in the treatment provider, but in the treatment which is applied.

Self-esteem in Active-type responders remains, for the most part, unchanged because these individuals do not perceive their illness situation to reflect in any way on their personhood or capabilities. In a psychodynamic vein, one
might speculate that ideologically motivated active responders embrace biomedically-oriented illness beliefs, i.e., beliefs which do not allow for the human control of their depressions, in order to defend against incipient threats to their sense of esteem.

In a 1984 article on "the uses of hopelessness" for individuals suffering from major mental disorders, Bennett and Bennett put forth an argument pertinent to the Active-type response. Their premise was that "in psychiatry more than in any other branch of medicine, the lack of evidence linking mental illness with random physical correlates has encouraged the overuse of theories [beliefs] that attribute causal responsibility to factors within human control" (p. 559). They argued that there was "destructive potential" in beliefs that mental illnesses like clinical depression were "responsive to human efforts". Bennett and Bennett claimed instead that mentally ill individuals would be far better served by resigning themselves to the human uncontrollability inherent in their suffering; suggesting that such an "abandonment of hope often brings new freedom" (p. 562).

With the important exception that the Bennetts' claim was honed to take into account the question of human controllability, it comes very close to reflecting the essence of the Plus-type response (to the resigned appraisal position) described above. It highlights the fact that the nonhuman agency/Active-type response pathway implies a similar relieving blamelessness for (the cause of) individuals'
troubles along with a temporized responsibility for personally controlling them.

The Apathetic-type response

As its name denotes, this pattern of response describes a pathway of outcome-based futility. Once again, what is interesting about this response is that it illustrates the effect that collateral illness beliefs and personality factors have on both the appraisal of depression controllability and the response which the appraisal elicits.

Specifically, the apathetic response is evoked for one of two reasons. Apathetic-type responders are either (a) without the ideological mooring which would enable them to be committed to a course of action in keeping with their appraisal of the controllability of their illness, or (b) they are of a disposition which compels them to become personally and meaningfully engaged in controlling their immediate situation—a perceived impossibility.

In the first instance, these responders have too little investment in a biomedical belief orientation to be persuaded of the usefulness of pursuing drug or somatic treatments; they are also insufficiently invested in a psychosocial belief orientation to fuel persistent self-control efforts in the face of the perceived impossibility of controlling depression through human agency. In the second instance, Apathetic-type responders can be seen as individuals with either or both a deep-seated internal locus of control
and a strong (existential) need to establish a meaningful lifesp.

Bursten (1985) published some pertinent clinical comments with regard to the interplay between ideology and the (dispositional) need for control in depressed patients. He observed that despite concerted efforts by contemporary psychiatrists to inculcate depressed patients with the notion of "biological depression" in order to help them better accept their illness and the biological treatment of it, such educational endeavors have occasionally backfired. Bursten found that for some of his patients "the loss of psychological control and responsibility" (p. 245) implied by the concept of biological depression was so unacceptable that it lead to nonadherence to antidepressant drug treatment.

For the purpose of enhancing conceptual clarity, the ideology-related and disposition-related functions were presented here as separate when, in fact, they are often related in people prone to responding apathetically to the nonhuman agency sequence of appraisal. Adaptational activity ceases for Apathetic-type responders when they believe that they are cut-off from their most cathedected and routinized avenues of response to challenge.

The perceived futility associated with this appraisal sequence amounts to a significant frustration of effectance motivation which is experienced as a uniquely personal kind of loss. Being a loss which comes on top of existing depressive affect, the Apathetic-type responder can become
further disheartened and languish, in some cases, morbidly. This state of apathy corresponds well to the learned helplessness brought on by the perception of noncontingency described in Seligman's original model of depression (1974).

Because the apathetic response is more than likely to contribute to depressive affect, Apathetic-type responders initially undergo an acute dip in their APR. When positive changes in their condition occurs, they are wont to attribute them to chance and other remote and/or inanimate factors. The apathetic response is also likely to engender an erosion of self-esteem.

Apathetic-type responders are apt to rely heavily upon internal attributions which dispose them to personalize their experience. As a consequence, finding themselves in a deeply affecting situation (depression) which they perceive to be beyond their control, these responders are susceptible to interpreting their current circumstances as indication of the failure of their whole way of life, i.e., a perpetual striving for mastery and control.

The Perceived Inefficacy Sequence: Elusive personal control

This sequence proceeds from successive Level I and Level II appraisals that affirm the possibility of depression control. Those appraisals render the view that it is possible for human beings to achieve some meaningful measure of control over their depressions as a result of their own self-directed efforts to do so. This sequence is determined
when the depressed individual makes a Level III appraisal that, for one reason or another, he or she is personally incapable of attaining that measure of control over depression which he or she believes to be generally attainable.

In this third sequence, the cognitive process funnels down from a consideration of illness (depression) to a consideration of the most salient aspect of personal efficacy in light of that illness, the ability to control it. The critical cognitions of this sequence are self-referent ones, as the cognitive process moves from universal concerns to egocentric ones, and from being a process which is categorical in nature to one which is highly contextual.

Because this sequence arrives at a judgment of personal inefficacy, it is able to provoke the most trenchant feelings of futility. However, the futility analysis here is somewhat more demanding than would be the case if the only pattern of response to the efficacy-based futility generated by this sequence was simple self-disparagement. Unlike the other sequences which have only two pathways associated with each of them, there are three distinctive appraisal-response pathways associated with the perceived inefficacy sequence. This greater differentiation of response is due to an extenuating option of proxy control.
Proxy control

The notion of proxy control is taken directly from Bandura's work on self-efficacy. It applies to those situations in which individuals shy from attempts to master the affecting circumstances of their lives, arranging instead for those circumstances to be controlled by others who are perceived either as being more generally powerful than themselves, or as having greater situation-specific competencies than themselves. Although the arrangement of this kind of suzerain relationship can be effective in securing the benefits of control, it subverts self-efficacy and usually calls for a certain amount of ingratiation.

Proxy control is presented here as a possible response to the appraisal that depression is humanly controllable but not by oneself. In particular, there are two pathways associated with the perceived inefficacy sequence which conclude with proxy control. One stems from a comparison with similarly affected others, but the other is noncomparative.

The Powerful Others/Active Proxy Control response

Of the three patterns of response to perceived self-in-efficacy, this is the one which is not based on a comparative appraisal of personal efficacy. Though this response definitely hinges on a percept of personal inefficacy, the

30 For a more general treatment of self-efficacy theory, see pp. 212 ff in Section F of the literature review which appears in Chapter II.
percept is nuanced by a belief in powerful others rather than by a sense of personal failure or incompetence. The Active Proxy Control response is fashioned more from a futility based on illness beliefs about depression than from a pure efficacy-based futility.

Active Proxy Control responders normally conceptualize depression as a medical problem. Therefore, they are inclined to believe that a physician is the only person capable of effectively controlling their depression. However, parallel configurations abound relative to other types of practitioners. In such cases, conceptualizations of depression guide Active Proxy Control responders’ belief in the special and exclusive competencies of anointed individuals to control their depressions, e.g., charismatic healers, naturopaths and other alternative practitioners, clerics, psychologists, etc.

A distinguishing point is that, for this type of responder, the turning toward an empowered figure represents an authentic response to illness and as such, this resort to proxy control implies no lessening of personal responsibility. Furthermore, it should be added that the Active Proxy Control response is probably a modal response for our culture. It embodies a widespread but unexamined element of Western socialization to matters of health and illness, namely, that healing ability resides with the treatment provider.
Despite the belief that direct control over depression is personally beyond him or her, this kind of proxy control responder adopts an active—even, vigorous—stance toward his or her treatment. These responders will be dogged in their pursuit of what they perceive to be the most appropriate treatment for them. Once in treatment, they feel confirmed in their patient role, they are enthusiastic about the treatment relationship, and are apt to be scrupulous about treatment compliance. Active Proxy Control responders look most favorably upon treatments based on ministrations either not available to them, such as antidepressant drugs or herbal preparations, or not within their framework of experience to carry out on their own, such as hypnotic techniques or behavioral interventions involving specialized "homework" assignments.

Because the Active Proxy Control response is channeled through a belief in others' resources, the exploitation of APR is initially mesmeric in nature. Limited though it is, the magnitude of the initial Active Proxy Control response should not be overly discounted. Belief in others' efficacy to control depression tends to be quite strong, and it resounds in a forceful albeit partial exploitation of resources.

The Active Proxy Control response is like the previously described Active-type response (of the Non-human Agency sequence) in that both conform to a mesmeric paradigm of APR use. In the initial phases of these cognate response
types belief is the salient active ingredient in the treatment response. Then, the need to discharge the duties of the patient role instigates a second phase of these responses, which involves a more conative, if circumscribed, utilization of their resources.

When Active Proxy Control responders experience symptom relief and other positive changes in their depressed condition, they attribute these to either or both the power of others to whom they turned and the efficacy of the methods they employed. As indicated above, Active Proxy Control responders' perception of personal inefficacy is an entirely noncomparative matter and, therefore, does not occasion a loss of self-esteem. Not only does belief in powerful others insulate Active Proxy Control responders from narcissistic injury, but they are inclined to attribute any residual evidence of inefficacy to the temporarily disabling effect of their underlying disease (depression). It should be recognized, however, that there is a possibility for some of these responders to experience a slight decrement in self-esteem due to the heightened sense of vulnerability which their clinical depression imposed on them.

The Diffused Self-Disparagement/Passive Proxy Control response

Like the immediately described response, this pattern of response terminates in proxy control, but it is arrived at in a wholly different manner. This is a response to per-
ceived inefficacy which derives from a comparative judgment about competency that reflects directly upon the self.

The depressed individual compares his or herself to other depressed individuals observed to be instrumental in successfully controlling their depressions, and concludes that he or she is incapable of doing the same. Faced with such invidious comparisons, these responders resort to proxy control as much to diffuse the implied meaning and potential injury of self-disparagement as to achieve control over their depressions.

Although the motivation to seek out proxy control in this case is a mixed one, the essence of the response is the avoidance of self-confrontation and the state of futility which comes from perceived self-inefficacy. For this reason, the response is an inauthentic one; a fact which is substantially borne out by the passive-dependent style of engagement that this type of proxy control responder relies upon to obtain treatment and in subsequently relating to treatment providers.

Passive Proxy Control responders believe not only that healing ability resides with the treatment provider, but that the responsibility for treatment (and healing) resides there as well. The Passive Proxy Control responder capitalizes on a dependent behavioral attitude in order to evade responsibility for treatment and treatment outcome. In addition, he or she can take advantage of a versatile strategem because passive proxy control is equally well ra-
tionalized in terms of both psychosocial and biomedical treatment orientations.

Consistent with the passivity of this proxy control response, there is little "belief in", or real commitment to, the power of any particular treatment provider or treatment method. Consequently, this proxy control response exploits far fewer antidepressive personal resources than its active twin.

When positive changes occur, they are attributed to the authoritarian figures to whom Passive Proxy Control responders submit themselves. Passive Proxy Control responders' attributions, however, are more often related to assigning blame for their lack of improvement or for treatment stagnation. Not uncommonly, these passive responders have an extravagant sense of entitlement which is easily frustrated when progress is either not forthcoming or is not as fast as they deem it ought to be. Then, they are inclined to project their own indolence and meagre investment in treatment onto the ideal scapegoat figures of their treatment providers.

Despite all of their inauthentic, self-protective maneuvering, Passive Proxy Control responders are bound to suffer a certain decrement in self-esteem. First of all, the crisis of perceived inefficacy is only imperfectly sealed off from their awareness by the recourse to proxy control; some degree of self-disparagement seeps through. Secondly, when a sense of personal defeat--even a partially
suppressed one—forces a person to surrender a share of his or her autonomy, a certain element of self-deprecation is bound to come into the bargain. In addition, the element of self-deprecation is fostered in the structure of passive-dependent relationships these responders establish with their proxy controllers.

The Despondent Self-Disparagement response

Of the three patterns of response to perceived inefficacy, this is unquestionably the grimmest. Like the previous pattern, it is a response to futility which is based on a comparative judgment of personal inability to control depression in light of evidence that similarly afflicted others are able to play a significant role in controlling their depressions.

In contrast to the immediately described, comparatively-based response, this response is quite authentic, if starkly regressive. Simply put, this pattern of response to the sequence of perceived inefficacy amounts to a crisis of self-devaluation producing a state of unalloyed despondency.

From a psychological point of view, Teasdale described the true sticking point or pathological core of depression as "depression about depression" (1985)—that is, a depressed syndrome fed by the feeling that depression is uncontrollable. The response of Despondent Self-Disparagement represents a very dark vision of Teasdale’s concept, in that
the already depressed person finds his or her depression to be uncontrollable by virtue of their own adjudged incompetence. Teasdale's concept thus helps to underscore the greater role that self-referent cognition plays in organizing the experience of self-disparaging responders than it does in responders who evince a stronger drive to achieve control over their depression (such as Active Proxy Control responders).

The despondent response should also be seen, however, as a qualitatively similar but quantitatively more extreme general response to serious illness which is shared by others. Seen in this light, it is the end point on a continuum of demoralization which is a concomitant of most people's disabling depression.

More than just delimiting the utilization of APR, this response causes an acute reduction of APR, a deterioration which is probably first expressed through neurohormonal influences on the immune system.

The attribution of change is something of an irrelevant question where self-disparaging responders are concerned. Given the degree of their despondency, positive changes are unlikely to occur; if they do occur they are unlikely to be accurately registered by them, due to the impaired cognitive style associated with this manner of response. Of course, negative changes provide further confirmation of these responders' negative self-perceptions, the clinical extreme of which are classical depressive delusions of guilt and worth-
lessness. It goes almost without saying that the despondent self-disparaging response occasions the most unbuffered, and therefore, severest blow to self-esteem.

The Effective Personal Control Sequence: Assuming responsibility for self-control

The last two responses to be considered are related to the most complete sequence of appraisal accounted for by the model. It is a sequence of thoroughgoing affirmation, resulting in no futility: depression is appraised to be effectively controllable down through the self-referent level. An appraisal of illness controllability of this kind opens the way for the mobilization of the fullest possible antidepressive response.

It is at this point that a final process of appraisal is etched into the response pathway. This process concerns the appraisal of responsibility for controlling depression, and corresponds to the attribution of the locus of responsibility for solutions discussed in Brickman et al.'s landmark article (1982) on models of helping and coping.

Although the appraisal of responsibility which takes place at this level is undeniably cognitive, it is hypothesized that the process is determined by the operation of a personality variable, responsibility-taking attitude. Further, it is proposed that responsibility-taking attitude is the ultimate factor which either releases or dampens the potential vigor of the antidepressive response evoked by an
appraisal of effective personal control. In the two patterns of response described below, responsibility-taking attitude differentiates individuals' responses to the prospect of achieving personal control over their depression.

The Self-Responsible Control response

The Self-Responsible responder not only believes that it is within his or her capability to achieve a meaningful degree of personal control over their depression, but he or she believes that it is also his or her responsibility to exercise that self-control. This is the optimal pattern of response in terms of the exploitation of APR. Utilization of APR is heterogeneous, involving (a) an mesmerically fashioned mobilization which arises from an unequivocal belief in the efficacy of personal efforts to control of depression, and (b) a conatively fashioned mobilization characterized by an executive employment of skills and regulation of effort.

Full awareness of their own antidepressive campaign enables Self-Responsible responders to attribute the positive changes which occur in their depressed conditions to themselves. Further, when self-enlistment in depression control is synchronous with an alleviation of the depressive syndrome, these responders enjoy a sense of effectance which translates into anything from a bolstering to a significant elevation of their self-esteem.
The picture is not altogether bright, however, because there is a potentially destructive underside to this pattern of response that certain self-responsible responders are susceptible to; those, for instance, with an excessive need for control. The flaw associated with this response manifests itself when the depressive syndrome does not appear to subside despite persistent attempts to effect self-control.

In that event, an arch belief in personal control, coupled with the self-responsible attitude which drives this response, work against the responder, making him or her feel a failure. After all—responders reason—if personal control of depression is within their reach and they do not attain it, that is patent evidence of their moral inadequacy and/or their instrumental inefficacy. Such reactions can trigger a self-perpetuating cycle of negative effects in which continued symptoms of depression become both an intolerable sign of the taint of personal failure and a pernicious source of depressogenic self-recrimination.\(^31\)

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\(^31\) The flaw inherent in this response is shared by other approaches to healing based on the notion of consummate self-control. Over the past several years, serious questions have been raised about health ideologies which adopt an unbridled view of the role of psychosocial factors in altering both the expression of and resistance to disease (e.g., Angell, 1985). In *Illness As Metaphor* (1977), Susan Sontag was one of the first writers to critically address the corrosive psychological effect which extreme thinking about self-control over illness has on cancer patients, in particular.
The Other-Responsible Control response

This pattern of response proceeds from an appraisal that the control of depression is personally achievable, but culminates in the consignment of antidepressive activity to figures who are perceived to be, not more capable, but more responsible than the depressed individual for the resolution of his or her depressive crisis.

This seems somewhat puzzling because it runs counter to our intuitive wisdom that people derive gratification from availing themselves of their competencies, in part, to sustain their autonomy. It may be easier to assimilate this pattern of response, however, if one thinks of the responder in terms of a "type" frequently observed by the author, in his clinical experience, to display this response: the capable, high-powered businessperson with a hyperrational outlook who is accustomed to delegating responsibilities.

This response is close to being like the Active Proxy Control response (described above), with the important exception that the Other-Responsible responder shunts the active direction of treatment to an authoritative other not out of a sense of perceived inefficacy, but out of sense of what the proper allocation of responsibility for his or her problem should be. As with the Active Proxy response, there is no intention here to evade responsibility. In addition, the two responses share the view that the locus of healing
lies beyond oneself, in treatment providers and their treatments.

The most parsimonious explanation of the Other-Responsible responder’s behavior lies in the absence of responsibility-taking motivation. Other-responsible responders may be driven to attain effective control over their depressions, but they are not driven to personally take ownership or command of that control.

Appropriate cueing is necessary to mobilize a substantial Other-Responsible response. For example, once these responders find themselves in a treatment situation congruent with their illness beliefs—typically, having been steered there by a spouse, a referring physician, or some significant other—they are able to extensively exploit their APR, in a chiefly mesmeric manner. Then, after a hierarchy of treatment responsibilities becomes clearly delineated, with the practitioner assuming principal responsibility, Other-Responsible responders are able to utilize their usually considerable resources in a conative manner.

The weakness of this response lies with the lack of treatment initiation efforts, not with the exertion of efforts to comply with treatment, or even, with the acquisition or development of new treatment-related skills once treatment is inaugurated.

Other-Responsible responders have a logical preference for biomedically-oriented treatment because self-directed
efforts to control depression are largely irrelevant to that kind of treatment. However, it would be a mistake to see this pattern of response as exclusively wedded to the biomedical treatment approach.

In fact, Other-Responsible responders are natural candidates for the combined pharmacotherapy and psychotherapy of their depressions. Such a combination affords these responders with the possibility of having mixed attributions for positive changes occurring in the context of their treatment. Some portion of the changes can be attributed to the practitioner, some to the efficacy of the practitioner’s treatment, and some to the responder him or herself, as the result of capable adherence to treatment.

The Other-Responsible response provides responders with the slight-to-moderate boost in their self-esteem which comes from a dutiful fulfillment of the patient role and from confirmation of their managerial mastery, i.e., their competence in arranging for the appropriate control of their depression.

Final Considerations

In concluding this presentation of the overall model of belief-mediated response to depression, I would like to offer three unrelated points of elaboration for readers’ further contemplation.

First, although it is quite obvious, it should be stated that, as with all proposed cognitive-behavioral
systems, there is an important feedback loop which operates in the model. The path of that loop goes from (a) illness and self-efficacy beliefs to (b), the behavior which is enacted on the basis of those beliefs, and back again to (a), where, in light of behavioral performance and the cognitive transformation which occurs through the attribution of behavioral change, those beliefs are either reinforced or discounted.

This feedback mechanism accounts for most of the significant, circular interrelation among level of depression control skills (and other APR), self-esteem, and perceived self-efficacy. The Self-Responsible Control response offers a good illustration of some of this circularity. When individuals engage in self-control efforts as part of their treatment for depression, self-efficacy beliefs comprise the major share of their belief in the efficacy of the treatment.

Second, as was identified at the outset, this model is unapologetically cognitive in its derivation and emphases. This cognitive orientation may give some readers cause to feel that its explanatory power could be enhanced by a certain degree of psychological reductionism with respect to the matter of latent personality variables. I find, however, that, for its present state of development, the model cannot bear the burden of any greater complexity.

For this reason, traits, characterological features, or other dispositional elements have not been introduced as
formal model components. However, a consideration of the effect of such potentially modulating influences on the mobilization and enactment of antidepressive response is perfectly compatible with the model as presented here. Moreover, I would like to suggest to readers that there appears to be a self-regulatory drive at the heart of the conative use of APR which seems to be most reflective of those influences.

Finally, I would like to point out that the model can be extrapolated, beyond the perspective of the depressed person, to the experiences of treatment providers and key individuals in the depressed person's surround. Specifically, the model can be used to appreciate the nature of the role that illness beliefs play in their cognitive appraisal of the affected person's depression. With that understanding, one can roughly gauge the impact those significant others are likely to have on the depressed person, i.e., whether their influence is likely to augment or inhibit antidepressive response.

32 Although I have come close to this in hypothesizing the operation of a responsibility-taking attitude.
PART II

MEASURING BELIEF ORIENTATION
CHAPTER IV

A THREE-PHASE PROCESS OF SCALE DEVELOPMENT: AN INTRODUCTION

Part One of this dissertation established the rationale for developing a means of assessing illness beliefs about depression and its treatment. Chapters II and III, in particular, set forth the theoretical underpinnings for the measure the author conceived of for accomplishing such an assessment, the Adult Survey of Beliefs About Depression and Its Treatment or, the BADIT.

The purpose of the combined activities described in this second part of the dissertation was to bring the BADIT to a rudimentary level of psychometric development. These activities were undertaken in the manner of a demonstration project, and the principal object in presenting them here is to show that they constitute a valid method for assessing beliefs about depression which is consonant with the author’s theoretical model of belief-mediated response to depression.

An important secondary aim of the scale development activities described here was to arrive at a version of the BADIT which could serve as a good starting point, or approximation, of the practical, versatile, and clinically useful tool the BADIT was intended to be.
This chapter is meant to provide a brief overview of the psychometric project, as a whole, and a skeletal outline of the contents of the other chapters in Part Two.

A Modified Sequential Strategy

Toward the end of developing a measure of illness beliefs about depression, the author pursued a sequential strategy of scale development. This approach was loosely based on a system for personality test construction propounded by Jackson, "wherein successive attempts are made to approach a specified variety of optimal properties" (1970, p. 65). The end product of the presently described work, therefore, is a "final" revision of the BADIT which reflects several prior stages of prescribed analysis and refinement.

In Jackson's sequential system, once a scale is revised in light of a given scale construction "hurdle", the evolving instrument is, generally, reformatted and then administered to a new sample. Due to practical constraints, successive revisions of the BADIT were not carried out in this manner, however. Rather, all analyses were performed on data which were gleaned using the same instrument.

In this way, successive revisions of the BADIT involved an instrument which was undergoing conceptual but not physical development. Successive revisions of the BADIT were simulated, so to speak, in the additional sense that further analyses were not carried out in conjunction with new data collections.
Three Phases, Two Revisions

The BADIT was brought to its present state of development as the result of three distinct phases of activity: 1) initial scale construction (i.e., scale conceptualization, item pool generation, and basic instrument design), 2) item analysis and revision, and 3) analysis of the structural component of validity (Jackson, 1970, p. 85). The initial phase of the work led to the creation of a 72-item BADIT questionnaire form. The second and third phases of work proceeded primarily on the basis of data collected from a development sample of 198 college undergraduates. The second phase work was also based on the responses of a panel of expert raters.

Each phase of scale development will be presented as a separate chapter in which introductory material and pertinent hypotheses, methods, and results will be set forth in specific detail.

Phases

The scale construction activity of Phase 1 was conducted in a fairly straightforward and conventional manner. Underlying constructs were defined, scales were designated according to their postulated content domains, and a large pool of items for those scales was generated and then editorially refined. Phase 2 activity, on the other hand, was

1 Described in Chapter V.
very different—more intricate and mostly quantitative\(^2\). It
was composed of a number of steps of analysis which were
carried out in two clearly identifiable stages. More dif­
ferent, still, Phase 3 was characterized by the use of the
specialized methodology of confirmatory factor analysis\(^3\).

Despite obvious differences, Phase 2 and Phase 3 activ­
ities were unified by a framework of overriding objectives
that determined the sequential strategy of scale development
which was employed. Stage One of Phase 2—which accounted
for the great majority of Phase 2 activity—was concerned
with securing a set of items demonstrating a good level of
content saturation, and Stage Two of Phase 2 was concerned
with securing scales with good internal consistency, or
homogeneity of scale content. This concern with scale homo­
geneity was continued in the third phase of BADIT develop­
ment activity, but with a crucial difference. In Phase 3,
concern with scale homogeneity was approached from a multi­
variate point of view that focused on scale structure.

Revisions

It has been implied that the process of revising the
BADIT was a fluid and progressive one, with item revision
occurring continuously throughout the process. There were,
however, two points in that process when the BADIT achieved
a kind of crystallization. One of these crystallizations

\(^2\) Described in Chapter VI.
\(^3\) Described in Chapter VII.
occurred fairly early in Phase 2, in light of outcomes from a content validity study. That crystallized version is referred to as Revision 1. The other crystallized version, referred to as Revision 2, was the cumulative expression of the intended item eliminations which were identified during the course of the other Phase 2 analyses. No further revisions of items were made in Phase 3, making Revision 2 the "final" revision of the BADIT achieved by the dissertation studies reported on here.
CHAPTER V.

PHASE 1. DEVISING THE BADIT:
BASIC INSTRUMENT DEVELOPMENT

The first phase of BADIT development was organized by those activities necessary for bringing into creation a practicable scale to measure illness belief orientation in relation to the etiology and treatment of depression. In essence, this meant translating an abstract conceptualization of the BADIT, as a representation of theoretical constructs, into a collection of formatted questionnaire items which could be deployed in the clinical assessment situation. The first step in achieving this "translation" was to explicitly define the nature of the BADIT's attribute domain.

Specifying the Attribute Domain

Like the great majority of psychological measures, the BADIT was designed to rely on self-reported responses, of the paper-and-pencil kind, as an indicator of a postulated variable of interest—in this case, illness beliefs about depression. Because of the problems which attend the indirect measurement of underlying variables, the first, and probably the most important, step in devising this new as
essment instrument was to specify, as precisely as possible, the attribute it purportedly measured.

The theoretical point of departure for specifying the attribute under measurement by the BADIT was the integral construct of a model of belief-mediated response to depression, presented earlier (in Chapter III), the perceived controllability of depression. It was hypothesized, in the model, that this construct which is an embedded element of every illness belief about depression, operates as the cognitive fulcrum of behavioral response to depression.

The author posited that readily identifiable but quite disparate perceptions of the controllability of depression become well articulated within North America’s two prevailing mental health ideologies, the biomedical and psychosocial schools. Further, it was asserted that perceptions that depression is, by and large, personally uncontrollable are encoded in biomedically-oriented illness beliefs, whereas perceptions that it is, by and large, personally controllable are encoded in psychosocially-oriented illness beliefs.

The BADIT’s attribute domain was defined in terms of the difference in the way that the personal controllability of depression is regarded within the two molar belief orientations. On an operational level, this meant that differences in ideological orientation served as the primary determinant of the content of the BADIT’s several scales.
The next step in defining scale content was in specifying that illness beliefs about the etiology of depression should be measured separately from illness beliefs about the treatment of depression. Previous research and writing (e.g., Brickman et al., 1982; D’Andrade, 1976; Kleinman, 1980; Rippere, 1977b; Weinstein, 1977a) provided substantial support for the view that beliefs about the etiology of an illness and beliefs about its treatment constitute functionally distinct cognitive domains requiring independent measurement.

After stipulating that beliefs about etiology needed to be measured separately from beliefs about treatment, the BADIT assumed the character of a device for measuring an attribute with two dimensions: a dimension of ideological belief orientation and a dimension of belief content, i.e., related to the topical content or subject matter of a given belief.

With these two substantive dimensions of the attribute domain established, the author was guided by theoretical considerations, clinical experience, and some scant but relevant research, in specifying how they should be scaled. The four possible combinations of the two dimensions (belief orientation x belief content) were identified as constituting distinct subdomains of illness beliefs about depression,
calling for the construction of four separate unipolar scales.

The four BADIT subdomains, along with their corresponding scale titles, were designated as follows:

a) biomedically-oriented illness beliefs about the etiology of depression, Biomedical/Etiology;

b) biomedically-oriented illness beliefs about the treatment of depression, Biomedical/Treatment;

c) psychosocially-oriented illness beliefs about the etiology of depression, Psychosocial/Etiology;

d) psychosocially-oriented illness beliefs about the treatment of depression, Psychosocial/Treatment.

Rationale for the Unipolar Scaling of Illness Belief Orientation

The seeming opposition of biomedical and psychosocial viewpoints might naturally lead one to suppose that biomedically-oriented and psychosocially-oriented beliefs would best be represented on opposite ends of a single, bipolar scale. The author’s clinical observations instructed otherwise, however.

Personal observation

In certain instances, people seem to maintain contradictory illness beliefs about depression. Closer inspection reveals, though, that, in such instances, beliefs are actu-

1 In which case, the BADIT would be comprised of two scales, an Etiology scale and a Treatment scale--both of which would be scaled on a single continuum of ideological belief orientation.
ally being held independently of one another, and not, as it often may appear, to the exclusion of one another. For example, it is common to find—among the general public and mental health professionals alike—individuals who believe that depression is variously caused by both psychosocial and biologic factors. And, it is equally common to find individuals who selectively believe in the efficacy—not necessarily combined—of aspects of both biomedical and psychosocial approaches to treatment. Further, concurrently held beliefs about the etiology and treatment of depression which cross over ideological orientations—e.g., "psychosocial factors cause depression but are most effectively treated biomedically"—offer the clearest indication that illness beliefs about depression exhibit a degree of cognitive differentiation greater than simple ideological bipolarity could account for.

In sum, it appears that there is a tendency for people to subscribe to highly individualized assortments of illness beliefs about depression, in which the complementarity between beliefs is not intuitively discernible.

American and British studies

Beyond the writer’s first-hand experience, there are some findings from empirical studies of British and American psychiatrists' treatment orientations which lend credence to the idea that the ideological orientation of illness beliefs about the treatment of depression is not likely to be a
bipolar phenomenon—at least, not among mental health professionals.

In a factor analytic study of the general treatment orientations of 365 American psychiatrists, the items comprising a "somatic" scale were found to be independent of the items comprising a "psychotherapeutic" scale. This lead researchers Armor and Klerman to conclude that the somatic scale represented "an orientation in its own right, not merely one end of a psychotherapy continuum" (1968, p. 249). In the same study, 17.5% of the 40 highest scorers on the psychotherapeutic factor scale, though self-identified as having "psychotherapeutic orientations", chose somatic therapies as the ideal form of treatment.

Armor and Klerman's findings were partially corroborated by attitude research carried out by Wilkinson and Williams (1986) on 179 members of the Biological Psychiatry and Psychotherapy sections of the (British) Royal College of Psychiatrists. Wilkinson and Williams used independent scales (Treatment Attitudes in Psychiatry Scales) to separately measure attitudes toward drug therapy and psychotherapy. Although there were statistically significant differences in the median scores of the two groups of psychiatrists, there was also a notable degree of overlap in the groups' respective views. For instance, 29.5% of the subjects drawn from the Biological Psychiatry section scored above the combined median on the psychotherapy scale, as did 79.5% of the participating members of the Psychotherapy sec-
tion (p. 584). Similarly, 25.3% of the Psychotherapy section subjects scored above the combined median on the drug therapy scale, along with 68.3% of their counterparts from the Biological Psychiatry section.

A Priori Scale Structure

From the very outset of the scale development project, the nature of the BADIT's scale structure was clearly understood to be a matter which could only be properly resolved via empirical inquiry. In recognition of this fact, the four initially designated scales are referred to throughout the text as "theoretical" scales. With this point established, it will be useful to briefly review here the intentions which guided the a priori determination of the BADIT's scale structure.

In sum, the author sought to implement two interrelated aspects of what was fundamentally the same measurement objective. One aspect of that objective was to construct scales that would faithfully reflect the theoretical substance from which they were derived. The other was to construct scales that would reflect, as faithfully as possible, some of the cognitive complexity which the author appreciated to be a frequently occurring characteristic of people's illness beliefs about depression.

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2 That empirical investigation was the focus of the third phase of BADIT scale development, and is the subject of Chapter VII.
Generating and Refining the Item Pool

The BADIT was expressly conceived of as a measure of personally reported but universally construed beliefs about depression. Therefore, each item considered for the item pool had to be able to stand on its own as a universal proposition. That is, each item had to be in the form of a statement about depression that could be either affirmed or denied and which applied in all cases.

Other non-content related characteristics of the items were that they were to be for adults of normal intelligence, of both sexes, who were more than superficially familiar with mainstream North American culture. In addition, items were roughly geared to a sixth or seventh grade reading level, not to exceed a tenth grade level of reading difficulty.

Contentwise, items were written or amassed to reflect the particular concerns and tenets of either the biomedical or the psychosocial school of mental health ideology with respect to either the etiology or treatment of depression. This generated an item pool of approximately 230 items. It was thought that a pool of this size had sufficient depth to ensure the survival of enough items through iterative revisions to eventually constitute reliable scales.

3 "Universally construed" in this context meaning disclosing that which is believed to be true for everyone.

4 A technical assessment of the reading level of item content was not carried out.
Almost three-fourths of the items in the original pool were written by the author. About 70% of these, however, were inspired by, or were adapted from, items belonging to pre-existing scales. One such source instrument was the Krantz Health Opinion Survey (KHOS; Krantz, Baum & Wideman, 1980), two others were untitled questionnaires which appeared in research reports (Rippere, 1977d, 1980e, 1980f), and a third was an unpublished research form entitled "Patient Attitudes and Expectations", used by the Treatment of Depression Collaborative Research Program (1982). A second set of both novel and adapted items (about 45) was gathered informally from colleagues.

The item pool was developed through successive stages of item writing, collation of theoretically related items, and editorial revision. Items were challenged to meet standards of logical coherence, unambiguous wording, succinct phrasing, and saturation with postulated scale content. To aid the process, some informal feedback on various collections of items was solicited and received from local experts on depression.

The item pool was refined and reduced until it was comprised of 93 items. This was deemed to be a workable number of items and a set capable of adequately covering the four designated BADIT subdomains.
Formatting the BADIT Questionnaire

**Unwanted sources of variance**

Controlling unwanted sources of variance was a leading consideration in fitting out the refined item pool as an assessment instrument; this took a number of guises.

First, although aware that reliability estimates are typically enhanced by instrument length, the author strove to keep the total number of items down to a minimum in an attempt to control for response fatigue.

Second, in an effort to control for unwanted method variance an attempt was initially made to balance the content addressed by each belief orientation. Difficulty was encountered in generating as many etiology items as treatment items, however. In consequence, the author settled for initially assuring that an equal number of etiology-related and treatment-related items were represented by each ideological orientation.

Third, an effort was made to control for acquiescent response bias by attempting to balance the ratio of negatively worded to positively worded items originally constituting each scale.\(^5\)

Fourth, in an attempt to control for unwanted variance due to the order of item presentation, a randomization

\(^5\) Four items dealing with etiology and eight dealing with treatment.
scheme was used to determine the sequence of items on the BADIT questionnaire form.

Assignment of items to scales

Guided by the considerations named above, items were selected from each of the designated scale groupings within the refined item pool, thus, ready for questionnaire formatting. Initially, 10 items were assigned to each belief orientation's etiology scale, and 15 items were assigned to each orientation's treatment scale; each belief orientation being initially represented by a total of 25 items distributed across two scales.  

After investigational studies with the original BADIT questionnaire had already commenced, it was realized that if the responses to a number of items were reverse-coded, the items would serve as better indicators of belief domains other than the domains they were written for. For example, item BADIT item (B50), which was originally written for the

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6 In addition to the 50 items accounted for by the four designated BADIT scales, the original BADIT questionnaire included another 22 items, making a total of 72 items. The additional 22 items comprised two trial scales that were loosely constructed to assess attitudes concerning personal responsibility-taking and depression. Because they were interspersed among the 50 BADIT items on the originally formatted questionnaire, these 22 extraneous items did contribute to respondents' experience with the BADIT. They were not, however, incorporated in any of the dissertation analyses.

7 Cited BADIT item numbers correspond to the numbers assigned to items on the original 72-item questionnaire which can be found in Appendix C. Throughout the dissertation, BADIT items are referred to as variable names which begin
Psychosocial/Etiology scale, reads: "It's ridiculous to think that there is a gene which is responsible for depression". Because the word 'gene', which is the content focus of B50, is so clearly biomedical in nature, it was reasoned that it should represent the Biomedical/Etiology scale as a reversed item.

There were nine such reverse-coded items⁸, and their reassignment to different scales altered the balanced distribution of items to scales. The resulting numbers of items assigned to each scale were as follows:

Biomedical/Etiology, 9; Biomedical/Treatment, 13; Psychosocial/Etiology, 11; Psychosocial/Treatment, 17.

**Item response formatting and instructions**

The underlying attribute of belief orientation was postulated to have a continuous distribution, consequently, a Likert-type agreement format was selected for the purpose of scaling BADIT responses. A scale with seven agreement points was specifically chosen in order to maximize scale reliability and response validity (see discussion in Velicer, DiClemente, & Corriveau, 1984, pp. 409-410).

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with 'B' and are followed by that number which identifies their position on the original questionnaire form.

⁸ Four items from the Biomedical/Treatment scale were reversed, two items each from the Biomedical/Etiology and Psychosocial/Treatment scales were reversed, and one item from the Psychosocial/Etiology scale was reversed.
The design of the BADIT response format was seen as another opportunity for attempting to reduce measurement error. In this regard, a closed block endorsement format was chosen as a means to minimize the likelihood of inadvertent response registration errors.

The final step in preparing the BADIT questionnaire for its initial use was the formulation of clear, brief, and simple instructions to prospective respondents.9

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9 These instructions appear near the top of the first page of the original, 72-item BADIT questionnaire which can be found in Appendix C, beginning on p. 455.
CHAPTER VI.

PHASE 2. REVISNG THE BADIT:
ITEM REVISION

The second phase of BADIT development was devoted to evaluating the psychometric properties of the newly devised measurement in order to appraise its reliability and related internal statistical structure (Nunnally, 1978), and its substantive component of construct validity (see Loevinger, 1957, pp. 654-661). This phase involved two distinct foci, or stages, of activity. The first of these stages was far more extensive than the second one, incorporating more than several different analyses. Its focus was the psychometric performance of individual items as indicators of the underlying attributes they were purported to measure. The focus of the second stage of Phase 2 activity was the psychometric performance of groups of items in providing a collective measure of postulated scale content.

In general, the endeavor to appraise the BADIT's internal validity was conducted in accordance with widely observed standards and prescriptions for developing sound psychological measures (e.g., Carmines & Zeller, 1979; Jackson 1970, 1971; Nunnally, 1978; Tyler & Walsh, 1979). Jackson's rendering of classical measurement theory (1970, 1971), however, had the greatest influence on the organization of the
multiple steps of Phase 2 analysis; in particular, his consistent emphasis that the best way to foil measurement error is to insure that items are saturated with designated theoretical content.

From an operational standpoint, a prime objective of Phase 2 activity was the progressive elimination of items believed to incorporate more measurement error than true attribute measurement.

**Stage One: Item Content Saturation**

Substantive Properties: A Content Validity Study

The first step the author took to vouchsafe the content saturation of the BADIT’s items was to recruit a panel of individuals, expert in the clinical subject area of depression, for the purpose of reviewing the scale designations of the items.

**Expert panel members**

Panel members were all previously known to the author and were personally recruited by him. The selection of panel members was guided by the objective of assembling individuals with a diversity of ideological and disciplinary viewpoints. None of those approached refused.

Panel members were asked to complete a background questionnaire which elicited information regarding current professional activities, training, experience, and general ideological orientation. The background questionnaires indi-
icated that the expert panel was, in fact, comprised of a diverse group of mental health professionals. These data from the Background Questionnaire are summarized in Table 1, which appears on the following page. (A copy of the Background Questionnaire can be found in Appendix A).

Procedure

Each of the panel members was asked to complete three rating tasks. A booklet consisting of three sets of dichotomous ratings, accompanied by special sets of instructions, was prepared for this purpose. (See Appendix B for a copy of the rating booklet.) None of the experts had prior exposure to any of the BADIT's items, and all of the rating tasks were carried out independently and on the experts' own time. The booklets were personally retrieved by the author as the rating tasks were completed; all of the ratings were completed within a one month period. In the first task, experts were asked to read each BADIT item and decide whether the manifest item content was "biomedical" or "psychosocial" in its ideological orientation. In the second task, experts were asked to reread all the items and determine whether the topical focus, or subject matter, of each item was related to "etiology" or to "treatment". In the third task, experts were asked to evaluate just the 22 items of the two trial responsibility-taking scales which were not included in the dissertation studies.
<table>
<thead>
<tr>
<th>Expert Panel Member</th>
<th>Profession</th>
<th>Chief Relevant Position</th>
<th>Percentage of Time Devoted to Professional Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Psychiatrist</td>
<td>4th yr. Resident (major medical center)</td>
<td>Diagnosis-10% Teaching-30% Treatment-25% Admin.-10%</td>
</tr>
<tr>
<td>2</td>
<td>Psychologist (Ph.D. cand. Social/Organiz.)</td>
<td>Research Asst. Collab. Study Depress.: Psychopharm. Training</td>
<td>Research-70% Teaching-30% Admin.-10%</td>
</tr>
<tr>
<td>3</td>
<td>Psychiatrist</td>
<td>Director, Education &amp; Training, Psychiatry (major university)</td>
<td>Diagnosis-10% Teaching-20% Treatment-25% Admin.-10%</td>
</tr>
<tr>
<td>4</td>
<td>Social worker</td>
<td>Coord., Psychiatric Social Work, (major medical center)</td>
<td>Diagnosis-10% Teaching-5% Treatment-50% Admin.-20%</td>
</tr>
<tr>
<td>5</td>
<td>Psychiatric nurse (MS.N.)</td>
<td>Teacher-practitioner (major medical center)</td>
<td>Treatment-5% Admin.-10% Research-20% Teaching-65%</td>
</tr>
<tr>
<td>6</td>
<td>Psychologist (Ph.D.)</td>
<td>Private practice</td>
<td>Treatment-95% Teaching-5%</td>
</tr>
</tbody>
</table>
Table 1 Continued

Backgrounds of Expert Panel Members

<table>
<thead>
<tr>
<th>Expert Panel Member</th>
<th>Treatment Orientation</th>
<th>Orientation of Training</th>
<th>Comfort with Being Considered an &quot;Expert&quot; in the General Area of Depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Holistic; eclectic</td>
<td>Biological; self-psychological</td>
<td>Felt fine with it</td>
</tr>
<tr>
<td>2</td>
<td>Behavioral; interpersonal</td>
<td>Behavioral; biological; social</td>
<td>Somewhat comfortable</td>
</tr>
<tr>
<td>3</td>
<td>Illness specific but psychotherapy-oriented</td>
<td>Psychoanalytic; psychobiological</td>
<td>Felt fine with it</td>
</tr>
<tr>
<td>4</td>
<td>Eclectic; family systems; ego-psychology</td>
<td>Ego-psychology; psychoanalytic</td>
<td>Felt fine with it</td>
</tr>
<tr>
<td>5</td>
<td>Interpersonal; psychodynamic</td>
<td>Eclectic; psychodynamic; behavioral</td>
<td>Somewhat comfortable</td>
</tr>
<tr>
<td>6</td>
<td>Eclectic</td>
<td>Behavioral; &quot;clinical&quot;</td>
<td>Somewhat comfortable</td>
</tr>
</tbody>
</table>
The expert panel's completed ratings were compared with the author's a priori assignments of items to their respective theoretical BADIT scales. Instances in which experts' ratings were discrepant with the author's designations were tabulated, and frequencies were summed across both raters and items. The extent of experts' agreement with each other when that agreement was discrepant from the a priori designations was also noted. Overall rates of experts' agreement with the a priori designations were calculated.

Results

Each of the six members of the expert panel made a total of 100 ratings of the 50 belief orientation scale items. The overall agreement rate between the experts' ratings and the a priori scale designations was 91.5%. Of a total of 600 ratings, there were 51 discrepancies which were distributed across 20 (40%) of the 50 items.

In the first task, when rating the ideological orientation of the items, the experts agreed with the a priori designations 87.3% of the time. When rating the content focus of items, the experts agreed 95.7% of the time with a priori designations. Only one item elicited discrepant ratings on both of the rating tasks.

The instances of discrepant ratings were somewhat unevenly distributed across the panel's members. Overall agreement rates, by expert, ranged from a high of 96% to a
low of 87%. Half of the panel accounted for nearly 70% of all of the discrepant ratings, with 13, 12, and 10 discrepancies each. One expert was responsible for eight discrepant ratings, accounting for 16% of all the discrepancies, with the balance of the discrepancies accounted for by two panel members who were responsible for four discrepant ratings apiece.

There were eight instances in which three or more of the six panel members agreed with one another on a rating that was discrepant from the author’s a priori designation of an item. Those eight instances accounted for 61% of all of the discrepant ratings.

Problem items

When the discrepant ratings were examined, it was discovered that, although reverse scored items accounted for only 18% of all the BADIT items, they were responsible for 55% of the total number of discrepancies. The reverse scored items were, then, more closely examined, and the likely source of many of the discrepancies became apparent.

In the directions to the rating tasks which appeared directly on the rating booklets, experts were explicitly instructed to evaluate the logical subject of the proposition stated in an item and not the item’s general point of view (for the verbatim text of the directions, see a copy of the rating booklet which appears in Appendix B). But if one takes B51, as an example, it is clear that the experts were
unable to keep those directions firmly in mind while making their ratings.

Designated as a psychosocially-oriented treatment item, B51 reads: "Desire to participate in treatment is admirable, but has no real bearing on whether depressive symptoms improve." In the statement of the item, the phrase 'desire to participate in treatment' functions as both the grammatical subject of the item as a sentence and as the logical subject of the item as a formal proposition. In both aspects, the subject of B51 is quite patently psychosocial in nature, pertaining as it does to the indisputably metaphysical phenomenon of 'desiring to' do something.

All but one of the panel members, however, judged B51 to be biomedical in nature; a fact which can only be explained in terms of deviation from the directions specified for the task. Five of the six experts must have rated the overall sense of B51, which was, indeed, emphatically biomedical in its point of view.

All nine of the reverse scored items elicited at least one discrepant rating; the median number of discrepant ratings for these items was three, and the maximum was five. Reverse scored items accounted for six of the 8 items with suspect agreement rates, i.e. items which elicited discrepant ratings from half or more of the panel members. And, in all but two of nine instances, the discrepant ratings on reverse scored items appeared to be the unmistakable result of a failure to carry out the rating task as di-
rected—the kind of failure illustrated above, in the example of B51. Because the two exceptions, Biomedical/Treatment items B60 and B72, were deemed, upon scrutiny, to be either poorly written or in violation of the assumptions by which their scale was defined, they were eliminated from any further analyses. These were the first items to be dropped from the BADIT.

The other 11, regularly scored items which had elicited discrepant ratings from the experts were individually examined in detail for evidence of conceptual ambiguity, awkward or confusing wording, and/or underlying premises which conflicted with theoretical scale definitions. In general, items were retained at this point, in the face of experts’ discrepant ratings, only if they met two criteria. The first criterion was met if an item was considered to make a unique contribution to covering the construct domain represented by a given scale. The second criterion was met if an acceptable argument could be posed to counter the author’s reconstruction of the hypothetical rationale for given discrepant ratings.

Based on a review using the above stated criteria, two more items, B21 and B28\(^1\) were dropped from further analysis. Three other items, B4, B9, and B31, were retained only provisionally, pending their performance profiles during subsequent analyses. With the exception of reversed scored

\(^1\) B21 was a Biomedical/Treatment item and B28 was a Psychosocial/Treatment item.
items, no item was unconditionally retained that had elicited discrepant ratings which were shared by more than two of the six expert panel members.

Revision 1

As a result of having used a panel of experts to check on the substantive properties of the BADIT items—namely, to determine whether the items representatively reflected the theoretical constructs implied by their respectively designated scales—four items were dropped from any additional analysis and three were "flagged" for special scrutiny during subsequent steps of the item revision phase of scale development. These changes yielded the first revision of the BADIT, reducing it to 46 items. Each scale was comprised of the following number of items:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical/Etiology</td>
<td>9 items</td>
</tr>
<tr>
<td>Biomedical/Treatment</td>
<td>10 items</td>
</tr>
<tr>
<td>Psychosocial/Etiology</td>
<td>11 items</td>
</tr>
<tr>
<td>Psychosocial/Treatment</td>
<td>16 items</td>
</tr>
</tbody>
</table>

Empirical Performance Properties: A Development Sample Study

The next step in proceeding with the Stage One analyses was to examine how the 46, Revision 1, BADIT items performed when they were administered in questionnaire format to a defined sample. In fact, the balance of BADIT scale development activity (described in this dissertation) was predicated on this kind of an empirical investigation of various psychometric properties. Moreover, all of the analyses
which are reported, here and in Chapter VII, are based on BADIT response data which was collected from a single sample of college students. For obvious reasons, the sample is referred to as a development sample.

In sections which appear immediately below, methodological details are provided regarding development sample subjects, measures other than the BADIT which were administered to the sample, and general procedures which were employed in collecting and analyzing development sample data. Then, in a series of separate sections which follow, the methods and/or results of individual Stage One and Stage Two analyses designed to evaluate different aspects of the BADIT’s internal validity are described.

At this juncture, it is important for the reader to bear in mind, once more, that, despite scattered allusions to the revision of the BADIT, only one version of the BADIT questionnaire was actually administered to development sample subjects. This version was the original 72-item questionnaire, a sample copy of which appears in Appendix C. The revisions of the BADIT which are mentioned were carried out, in simulated fashion, through selective treatment of the development sample data set.

Subjects

A development sample of 198 subjects was drawn from an undergraduate level, introductory psychology course at the University of Illinois at Urbana-Champaign. Subjects in-
cluded those students who opted to fulfill a course requirement through participation in departmental research studies. Subjects were recruited through a cooperative arrangement with the course instructor, Daniel N. Klein, Ph.D.

Measures

Demographic Variables

Four brief demographic items were appended to the original 72-item BADIT questionnaire for administration to the development sample. They queried respondents' age, sex, status as a Psychology major, and personal familiarity with treatment for depression. The latter two items were included as probes to gather pilot data on the speculative link between personal experience and beliefs about depression. (All of the appended items appear after item 72 on the original BADIT questionnaire which can be found in Appendix C).

The Beck Depression Inventory (BDI)

Following Jackson's admonitions to build concerns with construct validity into the earliest stages of scale development (1970), the author sought to gain some indication of the BADIT's specificity by administering the initial version of the BADIT along with a divergent measure of depressive psychopathology. Toward that end, a 21-item version of a widely used self-report measure of depressive severity, the Beck Depression Inventory (BDI; Beck & Beamesderfer, 1974--a
sample copy is included in Appendix C), was administered to the development sample.

BDI scores can range from 0-63. Scores below 10 are considered to be indicative of normal nondepressed states, while scores of 10-15, 16-23, and 24-63 are considered indicative of mild, moderate, and severe levels of depression, respectively (Shaw, Vallis, & McCabe, 1985, p. 384).

Because the BDI was not designed to be sensitive to subclinical depressive phenomenology, and because it was assumed that the development sample was comprised of psychiatrically normal individuals, some degree of restriction in the range of BDI scores was anticipated. Furthermore, review of literature on depression in college students suggested that it would be unlikely to find scores on the BDI in the "clinical" (above 10) range. Nevertheless, because it was unknown just how seriously curtailed the range of BDI scores might be, it was uncertain whether the correlation between BADIT scale scores and BDI scores would prove at all informative. Therefore, it was in the spirit of exploratory investigation that the BDI was employed with the development sample.

Procedure

The Institutional Review Board of the University of Rhode Island granted the author approval to conduct research involving human subjects. Subjects were, then, recruited in accordance with the conventions of required course options
in the Psychology Department of the University of Illinois at Urbana-Champaign. Once recruited, subjects were assembled for a single, group administration, at which time individual written consent to participate was secured. In a group briefing, the subjects were told that their "honest responses would help in the development of a new measure designed to assess people's beliefs about depression."

Subjects were given unlimited time to complete an administration booklet in which the BADIT, followed by the BDI, were preceded by another investigator's pilot collection of items related to depression.

To protect the privacy of individuals, each subject was assigned an identification number which was affixed to his or her completed questionnaire. Beginning with the transposition of data to coding sheets and thereafter, subjects were only identifiable by these numbers.

Data analysis

The Stage One analyses of Phase 1 were carried out using the "Correlation", "Frequencies", and "Regression" procedures of SPSS/PC+ software (SPSS Inc., 1986) on several models of IBM personal computers. Stage two analyses were carried out on an IBM 3083 mainframe computer, using the "Reliability" procedure of SPSS-X software (SPSS Inc., 1987).
Results

Demographic Variables

The development sample was comprised of 111 (56%) males and 87 (44%) females, who had a mean age of 18.8 years (SD = 1.7, \( \text{Mdn} = 18 \), range = 18). None of the subjects were Psychology majors, and only 2% intended to major in Psychology.

Only 27% of the sample acknowledged that either they, or someone close to them, had "received professional help for problems with depression". The item provided no further qualification of who the help recipient had been.

Table 2, which appears on pages 341-342, gives a breakdown of the subject characteristics of the development sample by sex.

The BDI

The Beck Depression Inventory scores for the development sample ranged from a low of 0 to a high of 24, with a mean of 5.4 (SD = 5.4, Mdn = 4, mode = 0). Although the group mean was considerably below the range of scores indicative of any depression, approximately 20% of the sample (\( n = 38 \)) did have BDI scores which were indicative of some level of depression, mostly mild. Only 12 subjects (6%) had scores which were indicative of a moderate level of depression; one subject had a score of 24 which was at the lower limit of the severe level. In light of the extremely low
overall level of their BDI scores, development sample sub-
jects were regarded as a not clinically depressed group.

The BADIT

In the sections which follow, statistics customarily
used in assessing the reliability and structural integrity
of psychological measures are reported. In most cases, two
sets of coefficients or statistical indexes are given. The
first set is for Revision 1 of the BADIT, the 46-item ver-
sion putatively administered to the development sample, and
the second set is for Revision 2 of the BADIT, a 20-item,
"final" version analyzed in Phase 2. Although presenting
two sets of indexes, in this manner, somewhat distorts the
sequencing of the analyses, it was felt that coherence would
ultimately be served by having all of the data for apprais-
ing each component of the BADIT's internal statistical
structure appear in one place.

Distribution of BADIT item responses
and scale scores

Histograms for the frequency distributions of both item
responses and computed scale scores were generated along
with the calculation of measures of central tendency and
other descriptive statistics.
Table 2
Subject Characteristics of the Development Sample by Sex (N = 198)

<table>
<thead>
<tr>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Mdn</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>111</td>
<td>18.83</td>
<td>1.70</td>
<td>18.00</td>
</tr>
<tr>
<td>Female</td>
<td>87</td>
<td>18.44</td>
<td>.77</td>
<td>18.00</td>
</tr>
<tr>
<td>Female</td>
<td>196</td>
<td>18.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>109</td>
<td>4.82</td>
<td>5.42</td>
<td>3.00</td>
</tr>
<tr>
<td>Female</td>
<td>85</td>
<td>6.11</td>
<td>5.96</td>
<td>5.00</td>
</tr>
</tbody>
</table>

* Different sample sizes within groupings due to unreported values.

* Beck Depression Inventory; scores below 10 considered not indicative of clinical depression.
Table 2 Continued

Subject Characteristics of the Development Sample by Sex (N = 198)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Familiarity with someone treated for depression</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N = 194)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know someone close</td>
<td>27</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>Don't know anyone</td>
<td>73</td>
<td>74</td>
<td>72</td>
</tr>
<tr>
<td><strong>Status as Psychology major</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N = 195)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Not major</td>
<td>98</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td>Intend to major</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>
Histograms were visually inspected to see the extent to which item responses and scale scores approximated normal distributions. Careful attention was paid to detect histograms for items which suggested noticeable departures from normality, e.g., curves which were distinctly bimodal, U-shaped, or marked by extreme kurtosis. In this regard, the histogram for one item, B53 (Psychosocial/Etiology), had the appearance of a definitely bimodal distribution of responses, and it was identified for elimination for that reason. Two other items, B16 and B68, had histograms which were somewhat suggestive of possibly bimodal distributions, and they were flagged for closer scrutiny during the next analyses.

In addition to visual inspection, skewness statistics were calculated for each distribution. Items with skewness values bordering on or exceeding an absolute value of 2.0 were duly noted. One item, B3 (Psychosocial/Etiology), had an extremely skewed distribution, with a skewness value which was greater than -2.0. Not only were B3 scores extremely skewed (in a negative direction), but the distribution was truncated as well. Approximately 88% of B3 item responses were distributed between the two extreme anchor points of disagreement. Considered to provide too little information, item B3 was identified for elimination.

There were two other items, B61 and B63 (both on the Psychosocial/Treatment scale), which had substantially skewed distributions. Their skewness values were -1.44 and
-1.21 respectively, and these items were flagged for special scrutiny. At this point, it is appropriate to note that the skewness values for the four theoretical scales were all quite low, the mean having been ±.32.

In conjunction with the inspection of histograms, individual item variances were compared to the mean item variances of their respective scales for indication of conspicuous restriction in the range of scores obtained for that item. With the exception of item B3, none was in evidence. This evidence was consistent with the analysis of item skewness.

In addition to an examination of items, the score ranges for the four theoretical scales were reviewed. The scale scores obtained for the Biomedical/Etiology, Biomedical/Treatment, and Psychosocial/Treatment scales took in an average of 62% of their possible score ranges, but the range of scale scores obtained for the Psychosocial/Etiology scale encompassed only 45% of its possible score range. This observation raised concern as to whether the range of computed scale scores for the Psychosocial/Etiology scale was so limited that it would be likely to adversely affect correlations involving the scale.

Linearity of items within their respective scales

One of the basic psychometric assumptions underlying the BADIT was that its scales were comprised of linearly related items. In order to search out possible violations of
this assumption, some rudimentary kinds of analyses were undertaken.

Initially, scatter plots of items and their scale remainders were visually inspected for evidence of an elliptical spread of points which characterizes linear relationships. The scatter plots were, in most cases, roughly elliptical in configuration, and those which were not elliptical were simply too diffused to assume any distinct pattern. Each item was, then, regressed onto its respective scale remainder and several examinations of those results were conducted.

To provide another check on the linearity of the items within their scales, scatter plots of the standardized residuals and the standardized predicted values from each regression equation were visually inspected for indication of non-linearity, i.e., non-random distribution of points. These plots offered evidence that the relationship between the BADIT items and their scale remainders was linear in nature, even in those cases in which that relationship did not appear to be a very strong one.

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2 The scale remainder of an item is the summed composite of all the items sharing the same scale as the given item, with that item removed. Depending on context and preference, the correlation between an item and its associated scale remainder is referred to as either an "item-remainder" correlation or a "corrected item-total" correlation; it will be referred to here as an item-remainder correlation.

3 This was also used as a check on the equality of the variance of each item in relation to its scale remainder.
To assess the strength of the linear relationship between each item and the other items in the scale to which it belonged, F statistics were calculated for the coefficient of determination of each regression model. Seven items were found to have F statistics with significance levels greater than .01. These were all regarded as having too weak a relationship between themselves and their respective scale remainders and, consequently, were identified for exclusion.

Normal distribution of measurement error

Another fundamental assumption underlying the BADIT was that the amount of error associated with the measurement of a belief (an item) was independent of the strength of that belief (the endorsement score for that item). In order to examine whether this assumption was upheld in the development sample data, two procedures were carried out. First, histograms of the standardized residuals from each regression analysis were visually inspected to determine how closely the distribution approximated a normal one. Second, the same standardized residuals were fitted to cumulative normal probability plots in order to see how close they came, in each case, to falling on the normal probability line. Inspection of both sets of plots, disclosed that the

4 The seven were: 2 Biomedical/Etiology items (B23, B59), 1 Biomedical/Treatment item (B39), 2 Psychosocial/Etiology items (B48, B56), and 2 Psychosocial/Treatment items (B40, B46).
standardized residuals exhibited an essentially normal distribution, indicating that error variance was not systematically correlated with BADIT item variance.

Item representativeness

The most direct examination of the content saturation of BADIT items took place through attempts to evaluate the performance of items in empirically representing the theoretical constructs reflected in their respective scale designations. This examination was carried out using two complementary methods.

Item-remainder correlations. It was reasoned that the strongest index of item representativeness is the positive correlation between an item and its other scale members. Therefore, item-remainder correlations were studied first.

A cut-off level was established whereby items with item-remainder correlations which were weaker than .25 were noted for probable exclusion from the BADIT. The mean item-remainder correlations for each of the Revision 1 theoretical scales appear below:\(^5\); values for the minimum and maximum correlations are provided in the parentheses:

- Biomedical/Etiology \( .34 (.12, .55) \);
- Biomedical/Treatment \( .36 (.16, .60) \);
- Psychosocial/Etiology \( .20 (.05, .29) \);
- Psychosocial/Treatment \( .28 (.11, .53) \).

\(^5\) Additional descriptive statistics for each of the theoretical scales can be found in Table 3, on p. 362.
In general, the item-remainder correlations for three of the scales were deemed acceptable, if somewhat lower than desirable. The mean of the item-remainder correlations for the items comprising the Psychosocial/Etiology scale, however, raised difficult questions about the average adequacy of those items in representing scale content. Six of the 11 item-remainder correlations for that scale fell substantially short of the liberal standard set by the author to evaluate item content saturation.

The item-remainder correlations that were recalculated for the "final" revision of the BADIT’s scales were appreciably better than those reported above for the Revision 1 scales, although the mean item-remainder correlation for the Psychosocial/Etiology scale was still quite low. The mean item-remainder correlations, along with minimum and maximum values (given in parentheses), for the Revision 2 scales were as follows:

- Biomedical/Etiology 0.48 (0.35, 0.54);
- Biomedical/Treatment 0.47 (0.40, 0.60);
- Psychosocial/Etiology 0.26 (0.15, 0.33);
- Psychosocial/Treatment 0.42 (0.32, 0.49).

**Item-scale-total correlations.** The other method which was used to appraise item representativeness required the computation of item-to-scale-total correlations. With that method, each item was correlated not only with its own scale total, but with the scale totals of the other three scales,
and the resulting pattern of item-scale-total correlations was analyzed from a substantive standpoint.

Items having a significant (p<.01) positive correlation with only the scale to which they were assigned, i.e., being uncorrelated with any other scale, were regarded as being most highly saturated with designated scale content. Further, items correlating positively with their own scale but also correlating positively with another scale of the same belief orientation were regarded as being favorably but not optimally saturated with designated scale content. Items, on the other hand, with positive correlations to scales of a differing belief orientation from their own were regarded as problematic, even when such items were also positively correlated with the scale to which they were assigned.

Only one of the 46 Revision 1 items did not correlate most highly with its own designated scale. In that case, the item, B66, had the same relatively strong correlation (.61) with a related scale, Biomedical/Etiology, as it did with its own Biomedical/Treatment scale; it was uncorrelated with either of the psychosocially-oriented scales.

Although many of the 46 Revision 1 items evinced significant negative correlations with scales of a differing belief orientation from their own—that is, in addition to

---

6 A review of all of the significant (p<.05) item-scale-total correlations for the Revision 2 item sets showed that there were almost four times the number of positive correlations (38) to negative ones (10), and that the mean size of
being positively correlated with their own scale—5 items did manifest complex patterns of correlation suggestive of questionable content saturation. These patterns included significant (p<.05) positive correlations of secondary (1 item) and tertiary (4 items) strength with scales of a differing belief orientation. These items were isolated for extra examination and possible elimination.

When this same analysis of item-scale-total correlations was repeated with just the 20 items comprising the Revision 2 BADIT, every item was found to be most strongly (and positively) correlated with its own designated scale. Furthermore, there was only one item, B67, that showed a pattern of scale total correlations which was suggestive of a problem with content saturation. A complete analysis of this item, however, offers an excellent example of the balance which must be reached in utilizing the separate results from the evaluation of an item’s representativeness before a decision can be made to discard the item.

As an item from the Revision 2 BADIT, B67 correlated strongly (.70) with its own scale, Psychosocial/Treatment. In addition, it correlated moderately well (.30) with a related, psychosocially-oriented scale, the Psychosocial/Etiology scale, and it correlated only weakly (.17, p<.02) with a scale differing in both belief orientation and content focus, the Biomedical/Etiology scale.

the positive correlations (.49) was more than double the mean size of the negative correlations (-.19).

7 The five were: B25, B43, B8, B40, B67.
In order to investigate a possible substantive cause for the quizzical pattern of correlations encompassing both belief orientations, the verbatim phrasing of B67 was referred to. The item reads: "By talking over painful events and childhood experiences, one can discover the source of one's depression and then, be rid of it". The author was unable to find anything in the language of the item which is even faintly evocative of a biomedical orientation to the etiology of depression. This evaluation was corroborated by the judgment of the experts who rated the items substantively. The panel unanimously rated the item as psychosocial in orientation, with all but one member rating it as treatment-focused.

In further assessing B67, it was necessary to bear in mind that it had the second highest item-remainder correlation of any of the items on either the Revision 1 or Revision 2 Psychosocial/Treatment scales. This finding was of special significance for being linked to the empirical performance of the item with development sample subjects. Namely, the relative magnitude of its item-remainder correlation indicated that B67 was a reasonably good representative of its designated scale content as that content was sampled by the other items of the Psychosocial/Treatment scale.

A decision was made to retain B67 on the basis of the foregoing extended appraisal of its item representativeness.
Stage Two: Homogeneity of Scale Content

In order to empirically assess the homogeneity of the theoretical scale content, or the internal consistency, of each of the BADIT's scales, the Cronbach coefficient alpha, an intraclass correlation, was calculated for each designated scale. Toward the end of achieving a "final" revision of the BADIT with scales having a high degree of internal consistency, alpha coefficients were calculated in iterative fashion, for each trial revision of a scale.

Initially, alpha coefficients were calculated for the Revision 1 BADIT scales, as a baseline of sorts: an index of homogeneity for scales which were understood to be contaminated by a fair amount of measurement error. The Revision 1 scales were constituted from a total of 46 items, more than a few of which had been identified for elimination because of indications that they were insufficiently saturated with postulated content. The values for the first set of alpha coefficients were as follows:

- Biomedical/Etiology: .65;
- Biomedical/Treatment: .70;
- Psychosocial/Etiology: .50;
- Psychosocial/Treatment: .66.\(^8\)

\(^8\) These data, along with other scale statistics for both revisions of the BADIT, can be found in Table 3 on p. 358.
Before continuing with a description of the formative effect which the calculation of Cronbach alphas had on the final revision of the BADIT’s scales, it should be briefly noted that another method of data analysis employed with this dissertation provided a more relative kind of appraisal of the homogeneity of the BADIT’s scales.

For separate purposes, the author subjected the development sample data to a confirmatory maximum-likelihood factor analysis. In that analysis, a number of models, representing different possible BADIT scale structures, were tested to determine which specification for the combination of items provided the best available fit to the obtained data. Perhaps the most important model tested was the author’s preferred theoretical model; it specified that items be combined according to the BADIT’s four scale designations.

It was hypothesized that the confirmatory factor model which provided the best overall fit to the development sample data would do so, in large part, because the combinations of items it specified as scales were those composites with the greatest degree of substantive homogeneity. As it turned out, the preferred model did provide the best fit, relative to the other measurement models, to the obtained data.

The methods and results of this analysis are described in detail in Chapter VII.
data. Among other things, this was taken to mean that the structured combination of items specified by the preferred model, the BADIT's designated scales, best accounted for the development sample data while cohering as four distinct measurements. This type of empirical performance was understood to be evidence of the relative homogeneity of the BADIT's theoretical scales.

Revision 2

After eliminating all of those Revision 1 items which a) had violated assumptions germane to the statistical analyses (10 items), b) had egregiously deviated from substantive expectations for the items (3 items), or c) were weakly correlated with their scale remainders (10 items), 23 items remained. They were distributed across the scales as follows: Biomedical/Etiology, 5; Biomedical/Treatment, 7; Psychosocial/Etiology, 4; Psychosocial/Treatment, 7.

The Cronbach coefficient alpha played a dominant role in shaping the final revision process. This conservative, i.e., lower-bound, estimate of internal consistency was recalculated numerous times for trial scales of differing item length. When the Cronbach alpha was calculated for several abbreviated versions of the BADIT's scales which were re-

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10 For all but the Psychosocial/Etiology items, this meant r's below .30. The overall level of the item-remainder correlations for the Psychosocial/Etiology items was so low that it was necessary to adjust this inclusion criterion downward to a cutoff of .25 in order to have enough items to comprise a revised scale. The strongest item-remainder for this scale, .2893 (B20), was itself below the .30 cutoff.
stricted to just those items with presumably good reliability, they proved to be as internally consistent as their lengthier, Revision 1 predecessors and in some cases, more so. Because the magnitude of the coefficient alpha is affected by scale length, this was a significant result. In light of this finding, the next step in revising the BADIT was to fix the desired number of items per scale. This decision was governed by three principal considerations.

The first consideration was a general concern with parsimony. It was believed that the scales should contain the minimum number of items necessary for providing the most reliable sampling of the attribute domain. Results from the repeated calculation of alpha coefficients indicated that this minimum number was between four and six items.

The second consideration was a concern for the practicality of the BADIT as a clinical assessment tool. It was most strongly felt that in order to assure the maximum clinical utility of the instrument, the scales would have to be comprised of equal numbers of items. An equal number of items per scale would make it easy to derive scale scores as unweighted summed composites ready for cross-scale comparison. This, in turn, would facilitate direct, intuitive interpretation of scale scores.

Repeated trials of different sized item sets showed that where six items per scale would have included too many weak items, four-item sets would have meant inadequate coverage of the respective content domains and an otherwise un-
desirable reduction in reliability. It turned out, however, that if the number of equal items was fixed at five, it would require the inclusion of only one "soft" item, B42 from the Psychosocial/Etiology scale. Although it was fully realized that to include an item in the BADIT like B42—an item with subpar reliability—was to incorporate an irremediable source of error into BADIT measurement, the value of clinical pragmatism prevailed. The decision was to construct five-item scales.

The fact that the author planned to study the second revision of the BADIT by method of confirmatory factor analysis had bearing on the third and final consideration in settling on an optimal number of items per scale. In his work on factor analysis, Gorsuch suggested an "absolute minimum" ratio of subjects to variables of 5:1, with a minimum of 100 subjects (1983, p. 332). Given that there were virtually 200 subjects in the development sample, the author was pleased to observe that with 5-item scales the ratio of subjects to variables in the planned factor analytic study would be approximately 10:1, twice the number prescribed by Gorsuch. Within the context of confirmatory maximum-likelihood factor analysis, this increased statistical power translated into the author’s increased ability to detect a lack of fit in his confirmatory factor models, thereby affording stronger tests of his hypotheses.

In terms of item revision, Revision 2 was the culmination of BADIT scale development efforts treated in this dis-
sertation. This "final" version of the BADIT consisted of 20 items divided equally among four theoretical scales. The complete wording, means, and standard deviations for these 20 items is presented in Table 4 (pp. 368-369). The Cronbach alpha coefficients for each of the Revision 2 scales were:

- Biomedical/Etiology \( \alpha = .72 \)
- Biomedical/Treatment \( \alpha = .71 \)
- Psychosocial/Etiology \( \alpha = .48 \)
- Psychosocial/Treatment \( \alpha = .67 \)

With the exception of the alpha coefficient for the Psychosocial/Etiology scale, the absolute magnitudes of the Cronbach alphas for the other three revised BADIT scales were in an acceptable range for "early stage" research measures of hypothesized constructs (Nunnally, 1978, p. 245). In addition, it is significant that these alpha coefficients were similar to, and in one case slightly better than, the coefficients which had been attained previously for the lengthier, Revision 1 counterparts of the three scales.

Because calculation of the Cronbach alpha is based on the intercorrelations among scale items, it was not surprising to find that the alpha coefficient for the revised
Table 3  
Cronbach’s Alphas and Selected Statistics for First and Second Revisions of Four Theoretical BADIT Item Scales (N = 198)

<table>
<thead>
<tr>
<th>Theoretical Scale</th>
<th>BIO/ETIO$^a$</th>
<th>BIO/TX$^b$</th>
<th>PSY/ETIO$^c$</th>
<th>PSY/TX$^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision 1</td>
<td>9 (N = 187)</td>
<td>10 (N = 189)</td>
<td>11 (N = 184)</td>
<td>16 (N = 181)</td>
</tr>
<tr>
<td>Revision 2</td>
<td>5 (N = 192)</td>
<td>5 (N = 194)</td>
<td>5 (N = 190)</td>
<td>5 (N = 193)</td>
</tr>
<tr>
<td><strong>Cronbach’s Alpha</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision 1</td>
<td>.65</td>
<td>.70</td>
<td>.50</td>
<td>.66</td>
</tr>
<tr>
<td>Revision 2</td>
<td>.72</td>
<td>.71</td>
<td>.48</td>
<td>.67</td>
</tr>
<tr>
<td><strong>Mean Item-Remainder Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision 1</td>
<td>.34</td>
<td>.36</td>
<td>.20</td>
<td>.28</td>
</tr>
<tr>
<td>Revision 2</td>
<td>.48</td>
<td>.47</td>
<td>.26</td>
<td>.43</td>
</tr>
<tr>
<td><strong>Mean Inter-Item Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision 1</td>
<td>.18</td>
<td>.19</td>
<td>.08</td>
<td>.12</td>
</tr>
<tr>
<td>Revision 2</td>
<td>.34</td>
<td>.33</td>
<td>.16</td>
<td>.29</td>
</tr>
<tr>
<td><strong>Scale Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision 1</td>
<td>Mean 33.98</td>
<td>33.98</td>
<td>48.27</td>
<td>74.88</td>
</tr>
<tr>
<td></td>
<td>SD 6.30</td>
<td>6.92</td>
<td>6.10</td>
<td>8.58</td>
</tr>
<tr>
<td>Revision 2</td>
<td>Mean 17.89</td>
<td>16.18</td>
<td>18.77</td>
<td>24.95</td>
</tr>
<tr>
<td></td>
<td>SD 4.61</td>
<td>4.45</td>
<td>4.32</td>
<td>3.73</td>
</tr>
<tr>
<td><strong>Item Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revision 1</td>
<td>Mean of Item Means 3.78</td>
<td>3.40</td>
<td>4.39</td>
<td>4.68</td>
</tr>
<tr>
<td></td>
<td>SD (Mean of Item Means) .57</td>
<td>.64</td>
<td>1.07</td>
<td>.81</td>
</tr>
<tr>
<td>Revision 2</td>
<td>Mean of Item Means 3.58</td>
<td>3.24</td>
<td>3.75</td>
<td>4.99</td>
</tr>
<tr>
<td></td>
<td>SD (Mean of Item Means) .47</td>
<td>.78</td>
<td>.83</td>
<td>.54</td>
</tr>
</tbody>
</table>

$^a$ BIOMEDICAL/ETIOLOGY  
$^b$ BIOMEDICAL/TREATMENT  
$^c$ PSYCHOSOCIAL/ETIOLOGY  
$^d$ PSYCHOSOCIAL/TREATMENT
Psychosocial/Etiology scale continued to be problematically low—the mean inter-item correlation for the Psychosocial/Etiology scale (.16) was practically half the size of the next lowest mean inter-item correlation (.29). Expected or not, the unacceptable absolute magnitude of the alpha coefficient for the Psychosocial/Etiology scale signaled a serious shortcoming in the author's attempt to develop a reliable measure of psychosocially-oriented beliefs about the causes of depression. Further consideration of the nature of the persistent unreliability associated with the Psychosocial/Etiology scale will be taken up in a discussion of overall results which appears in Chapter VII.

**Stability Over Time**

The arrangements which were made for administering the BADIT to the development sample also afforded a possibility of collecting retest data. Regarded as a prospect of convenience, a retest administration was judged a worthwhile opportunity for acquiring some provisional data on the retest of BADIT scale scores over time.

"Hypotheses"

Although collecting a retest sample seemed too attractive an opportunity to forgo, the particulars of the retest study itself were beyond the author's control to determine.

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11 These data, for both revisions of the BADIT, are displayed in Table 3 on p. 358.
Given this character of the investigation, no explicit hypotheses were formulated. The author did have a number of theoretically-informed hunches, however, as to how the retest data should generally come out.

The illness beliefs about depression which are measured by the BADIT's scales were conceptualized, elsewhere in this dissertation, as partaking of the permeable collection of illness-related constructs that Kleinman would call an explanatory model of depression (1980). As such, illness beliefs about depression were postulated as being subject to change, with the corresponding effect that BADIT measurement was expected to be reactive to life experience.

Although theory suggested that the underlying attribute measured by the BADIT is essentially mutable, it was wholly uninformative about predicting, with anything like quantitative precision, the degree of stability one should expect to encounter in BADIT retest scores. Reasonableness dictated, however, that one might expect to generally observe a slight-to-moderate degree of fluctuation in individuals' beliefs about depression over a six-week interval. Therefore, it was expected that the amount of change in BADIT scale scores--due solely to change in beliefs and not attributable to measurement error--would be reflected in test-retest coefficients in the moderate range of .55 to .75. Certainly, just taking into account change in underlying beliefs, one did not expect to see test-retest coefficients for BADIT scale scores that would be in either a low range (.30's and
below), suggestive of a thorough turnover in beliefs, or in a high range (.80's and above), suggestive of nearly complete fixity and stasis.

Methods

A subsample of 62 subjects was drawn from the original development sample of 198 students taking an introductory level Psychology class at the University of Illinois at Urbana-Champaign. The retest sample was constituted from those students on the course enrollment list who had opted to participate in experimental research but who would not have had enough hours of participation to satisfy the course requirement by the semester's end. Although the percentage of males in the retest sample (66%) was ten percent higher than it was in the test sample, the two samples were quite similar in other respects.\textsuperscript{12}

Six weeks after the initial administration, the original 72-item BADIT questionnaire was administered to the retest sample under conditions made as much alike the initial test conditions as was feasibly possible.\textsuperscript{13} Because two retest subjects left their BADIT questionnaires entirely blank, only 60 protocols contained usable data.

\textsuperscript{12} The mean age of subjects was 18.8 years, 23% were familiar with someone close treated for depression, and only 2% were Psychology majors or intended to major in Psychology. For comparative reference, see Table 2 on pp. 341-342.

\textsuperscript{13} The BDI was not re-administered to the retest subjects.
Results

Test-retest coefficients were computed as Pearson product-moment correlations between the two sets of four (Revision 2) BADIT scale scores obtained by retest sample subjects. These test-retest coefficients were as follows:

- Biomedical/Etiology: 0.66
- Biomedical/Treatment: 0.70
- Psychosocial/Etiology: 0.41
- Psychosocial/Treatment: 0.62

With the exception of the test-retest coefficient for the Psychosocial/Etiology scale, test-retest coefficients for three of the BADIT scales were observed to be in the moderate range (.62 to .70), as had been expected. A question immediately comes to the fore, however, concerning the proper interpretation of these coefficients.

Problematic interpretation

Are test-retest coefficients for BADIT scale scores which were obtained at a six-week interval good indexes of the dependability of BADIT measurement? That is, how much of the shift in BADIT scale scores that produced correlations which deviated from identity resulted from meaningful changes in beliefs and how much was due to residual unreliability in the BADIT, the method of measuring those beliefs?

All correlations were significant at the p<.001 level.
Despite general uncertainty about the implications of the reported test-retest coefficients for BADIT reliability, does the size, alone, of the coefficient for the Psychosocial/Etiology scale, in relation to the sizes of the coefficients for the other BADIT scales, warrant the conclusion that it indicates score instability attributable to measurement error? In other words, because the test-retest coefficient for the Psychosocial/Etiology scale was so far out of the range of expectation set by the coefficients for the other scales--even though we do not really know what those coefficients mean--does that coefficient ipso facto signify error variance?

Given converging indications from other analyses that the Psychosocial/Etiology scale yields relatively unreliable measurements, e.g., low Cronbach alpha, one is strongly inclined to conclude that this was the case. Regrettably, the highly adventitious circumstances under which these retest data were collected make such inferences merely speculative.

This is not the only interpretation difficulty presented by the results from this six-week retest sampling, however. For instance, if one assumes that these test-retest coefficients are indexes of dependability, then it would follow that coefficients for Revision 1 scale scores should be lower than the coefficients for the corresponding Revision 2 scale scores (the ones reported here) because Revision 2 was achieved through a winnowing of unreliable
items. But this is not the case. The test-retest coefficients for the Revision 1 scale scores were—with the exception of the Psychosocial/Etiology scale—in one case similar to, and in two cases actually higher than, the coefficients for the same Revision 2 scale scores!
CHAPTER VII.

PHASE 3. INQUIRING INTO THE BADIT’S STRUCTURAL VALIDITY: A CONFIRMATORY FACTOR ANALYSIS

In a 1957 monograph on psychological test validity, Loevinger made the strong point that "if tests are to serve as instruments of theory, no consideration is more critical" than whether item responses conform to a structure predicated on the hypothetical modeling of the attribute under measurement (pp. 663-664). This consideration formed the basis of what Loevinger identified as the structural component of (construct) validity; one of three components she argued that scale developers were obliged to establish (1957, p. 654).

The purpose of the third and final phase of BADIT scale development, detailed in this chapter, was to appraise the BADIT’s structural validity. In keeping with Loevinger’s dictum (above), and with Jackson’s (1970, p. 85) subsequent to hers, the author undertook to discover the empirical structure of the BADIT in order to determine the degree to which it conformed to the description of structural relationships offered in his theoretical model of illness beliefs about depression.

To conduct the Phase 3 inquiry, confirmatory maximum-likelihood factor analysis (CFA) was employed. CFA allows
the theoretically-motivated investigator to impose substantively based constraints on the derivation of factor analytic solutions. Most importantly, CFA is specifically designed for the explicit testing of structural hypotheses. In the present study, CFA enabled the author to test whether his a priori theoretical designation of BADIT scale structure was empirically justified.

The Phase 3 study of the BADIT's structure proceeded in two stages. The first stage involved the initial specification of eight separate measurement models and the evaluation of the comparative fit of these models to the observed data sample. The second stage involved the further, step-wise specification of the best-fitting model from the previous stage. In the exposition of the study which follows, results from each stage of the process are integrated with the statement of hypotheses and the presentation of relevant methodological matters.

Subjects

The subjects for this study were the 198 undergraduate students who constituted the development sample described in Chapter VI. Selected demographic characteristics of the development sample are displayed, by sex, in Table 2, which appears on pp. 341-342.
Measures

The data for this CFA study were collected in a group administration of the original, 72-item BADIT questionnaire (as described in Chapter VI). Only the 20 items on the Revision 2 BADIT, however, were actually entered into the analysis. The verbatim wording of those items, grouped according to their theoretical scale membership and displayed along with their respective item means and standard deviations, is given in Table 4 (pp. 368-369).

Data Analysis

The author adopted the LISREL model, a covariance structure model first introduced by Jöreskog (1973), as the procedure for deriving the structural equations for the different models of measuring illness beliefs about depression with the Revision 2 BADIT. The confirmatory maximum-likelihood factor analytic solutions were carried out with the use of LISREL VI software (Version 6.6; Jöreskog and Sörbom, 1986), running under SPSS-X (SPSS, Inc., 1987)¹, on an IBM 3083 mainframe computer.

¹ Refer to SPSS, Inc. (1984) for a technical treatment of this procedure.
Table 4

Final Set of BAPIT Items (Revision 2) Entered into a Confirmatory Factor Analysis. Grouped by Four Theoretical Scales (N = 198)

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIOMEDICAL/ETIOLOGY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B11. Depression runs in families because it is an inherited disease. (N = 196)</td>
<td>2.92</td>
<td>1.45</td>
</tr>
<tr>
<td>B27. A large proportion of depressions stem from hormonal problems. (N = 197)</td>
<td>3.80</td>
<td>1.15</td>
</tr>
<tr>
<td>B37. Feelings of depression are the product of biochemical imbalances in the brain. (N = 197)</td>
<td>4.00</td>
<td>1.16</td>
</tr>
<tr>
<td>B45. The symptoms of depression are caused by something like a blood disease which affects the brain. (N = 196)</td>
<td>3.22</td>
<td>1.27</td>
</tr>
<tr>
<td>B50. It’s ridiculous to think that there is a gene which is responsible for depression. (N = 195)</td>
<td>3.95</td>
<td>1.62</td>
</tr>
<tr>
<td><strong>BIOMEDICAL/TREATMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B1. Doctors can now use specially developed drugs to cure depression. (N = 198)</td>
<td>4.33</td>
<td>1.57</td>
</tr>
<tr>
<td>B57. Even if their life situations don’t improve, as long as depressed people are put on the right medication, their depressions will clear up. (N = 195)</td>
<td>2.52</td>
<td>1.13</td>
</tr>
<tr>
<td>B66. The treatment of depression primarily involves readjusting the levels of certain brain substances and regulatory mechanisms in the body. (N = 194)</td>
<td>3.73</td>
<td>1.18</td>
</tr>
<tr>
<td>B69. Like diabetes, depression is a disease which can generally be controlled by taking medication. (N = 194)</td>
<td>2.96</td>
<td>1.35</td>
</tr>
<tr>
<td>B71. To treat depression effectively, it’s ultimately more important for a psychiatrist to know the right medication to prescribe than to know how to establish a good relationship with his or her depressed patient. (N = 194)</td>
<td>2.62</td>
<td>1.27</td>
</tr>
</tbody>
</table>

*Reverse scored item*
Table 4 Continued

Final Set of BADIT Items (Revision 2) Entered into a Confirmatory Factor Analysis, Grouped by Four Theoretical Scales (N = 198)

<table>
<thead>
<tr>
<th>Item</th>
<th>PSYCHOSOCIAL/ETIOLOGY</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>B6.</td>
<td>People become depressed because they have sinned and behaved immorally. (N = 197)</td>
<td>2.58</td>
<td>1.64</td>
</tr>
<tr>
<td>B18.</td>
<td>A person will not become depressed unless something goes wrong in their life. (N = 197)</td>
<td>3.33</td>
<td>1.60</td>
</tr>
<tr>
<td>B20.</td>
<td>The underlying cause of almost every depression is a feeling of being unlikeable or without worth. (N = 195)</td>
<td>4.71</td>
<td>1.36</td>
</tr>
<tr>
<td>B30.</td>
<td>The main reason people get depressed is that they develop a distorted way of looking at things and thinking about them. (N = 196)</td>
<td>4.20</td>
<td>1.43</td>
</tr>
<tr>
<td>B42.</td>
<td>The prime cause of depression is the loss of someone close or some other important loss. (N = 196)</td>
<td>3.99</td>
<td>1.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>PSYCHOSOCIAL/TREATMENT</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>B64.</td>
<td>Knowing that someone truly cares and stands by them, is often the one thing which enables people to finally pull out of a long and crippling depression. (N = 195)</td>
<td>5.78</td>
<td>1.11</td>
</tr>
<tr>
<td>B65.</td>
<td>Depression can be cured by changing the depressed person's environment to make it more pleasurable and rewarding. (N = 194)</td>
<td>4.95</td>
<td>1.10</td>
</tr>
<tr>
<td>B67.</td>
<td>By talking over painful events and childhood experiences, one can discover the source of one's depression and then, be rid of it. (N = 194)</td>
<td>4.49</td>
<td>1.22</td>
</tr>
<tr>
<td>B68.</td>
<td>Talking about one's problems may provide temporary relief, but can never cure a severe depression. (N = 194)</td>
<td>4.48</td>
<td>1.34</td>
</tr>
<tr>
<td>B70.</td>
<td>In order to get better, depressed people must use their inner strengths to struggle with and fight off their depressions. (N = 193)</td>
<td>5.22</td>
<td>0.94</td>
</tr>
</tbody>
</table>

*Reverse scored item
Initial Specification and Model Fitting

The Eight Measurement Models

The author generated eight BADIT measurement models which were intrinsically meaningful for their theoretical interest. The eight models were elaborated independently, i.e., they were not hierarchically arranged. Although it would have been desirable to have a hierarchical array of models to test, most of the models in such a nested array would have been without substantive merit. A zero-factor model, not included among the eight models to be described, was automatically generated by the LISREL program as a baseline for evaluating the fit of specified models.

In order to examine the full complement of common factor interrelationships, all eight models were specified as having fully oblique common factors, i.e., all intercorrelated. This was to meet the needs of theory testing and theory building. In addition, all eight models were specified as having completely independent error factors, i.e. all uncorrelated with one another. This was consistent with a basic, parsimonious measurement assumption.

Four-Factor Model

Model 4, the only four-factor model, corresponded to the author's preferred theoretical model, the model which guided the construction of the BADIT. It is being presented, here, first—out of sequence—because it serves as a
reference for the other models. Fully described in Chapter V, this model represented the hypothesis that BADIT items are indicators of four distinct common factors, each an ideologically-oriented domain of beliefs about either the etiology of depression or its treatment. In practical terms, this model implied four unipolar scales: "Biomedical/Etiology" (biomedically-oriented beliefs about the etiology of depression); "Biomedical/Treatment" (biomedically-oriented beliefs about the treatment of depression); "Psychosocial/Etiology" (psychosocially-oriented beliefs about the etiology of depression); "Psychosocial/Treatment" (psychosocially-oriented beliefs about the treatment of depression).

Figure 2, appearing on p. 372, illustrates the initial specification of Model 4.

One-Factor Model

Model 1, the sole one-factor model, represented the hypothesis that all BADIT items are indicators of a single common factor, one latent dimension of belief about depression. Practically, this model implied a single, possibly bipolar, global scale, "Beliefs About Depression".

Two-Factor Models

There were two two-factor models, Models 2a and 2b. Model 2a represented the hypothesis that BADIT items are indicators of either of two common factors of ideological belief orientation. One was a factor of psychosocially-ori-
Figure 2. Preferred Confirmatory Factor Model for Measuring Beliefs About Depression and Its Treatment: Four Fully Correlated Common Factors and Uncorrelated Error Factors [Model 4]
ented beliefs, and the other a factor of biomedically-ori­
ented beliefs. This model was important because it chal­
lenged the notion that there are separate domains of belief based on the content matter of beliefs. In that sense, this model stood as a more parsimonious version of Model 4, the preferred model. Practically speaking, Model 2a implied two unipolar, belief orientation scales: "Biomedical" and "Psychosocial".

**Model 2b** represented the hypothesis that BADIT items are indicators of either of two common factors of illness belief content. One was a factor of beliefs about the etiology of depression and the other a factor of beliefs about the treatment of depression. This model was significant for having most clearly represented illness beliefs about depression as a bipolar phenomenon. The implication here was that while it was held that beliefs about etiology and treatment require separate domains for their expression, they are identically scaled on an underlying continuum of ideological orientation which has biomedical and psychoso­cial poles. In practical terms, therefore, Model 2b implied two bipolar, belief content scales: "Etiology" and "Treatment".

It is useful to take note that the preferred four-fac­tor model, Model 4, is a complete factorial combination of Models 2A and 2b.
Three-Factor Models

There were four three-factor models, Models 3a, 3b, 3c, and 3d. Models 3a and 3c were alike in that both represented hypotheses in which BADIT items are postulated as indicators of one common factor of ideological orientation that is heterogeneous with respect to belief content, and two common factors that are similarly-oriented domains of belief about different subject matter. In Model 3a, content differences collapsed across the psychosocial belief orientation, and in Model 3c, content differences collapsed across the biomedical belief orientation. Both Model 3a and Model 3c were elaborated as more parsimonious variants of the preferred theoretical model; the parsimony of these models, however, was not as far-reaching as that of Model 2a.

The BADIT scale structure implied by Model 3a was "Biomedical/Etiology", "Biomedical/Treatment", and "Psychosocial". The BADIT scale structure implied by Model 3c was "Psychosocial/Etiology", "Psychosocial/Treatment", and "Biomedical".

Model 3a was particularly noteworthy because the author suspected that it, and not Model 4, might provide the best fit to the obtained data. Due to the weakness in the Psychosocial/Etiology scale which had been identified during Phase 2 analyses, it was reasonable to expect that the items designated as indicators of psychosocially-oriented beliefs about the etiology of depression might not explain enough variance to warrant retention as a common factor. If there
was too much error variance associated with Psychosocial/Etiology items to define a significant common factor, it was felt that Model 3a would capitalize on the measurement problems by allowing psychosocially-oriented beliefs about the etiology of depression to be regarded as essentially indistinguishable from psychosocially-oriented beliefs about the treatment of depression.

Models 3b and 3d were alike in that both represented hypotheses in which BADIT items are postulated as indicators of one common factor of belief content that is heterogeneous with respect to ideological orientation, and two common factors that are dissimilar in orientation but address the same subject matter. In Model 3b, ideological differences collapsed across beliefs about etiology, and in Model 3d, ideological differences collapsed across beliefs about treatment. Model 3b and Model 3d were of interest because, like Model 2b, they offered tests—albeit partial ones—of the intuitively appealing idea that illness beliefs about depression are bipolar in nature.

The BADIT scale structure implied by Model 3b was "Biomedical/Treatment", "Psychosocial/Treatment", and "Etiology". The BADIT scale structure implied by Model 3d was "Biomedical/Etiology", "Psychosocial/Etiology", and "Treatment".
Comparative Assessment of Fit

To assess the overall fit of each measurement model to the development sample data, Goodness-of-Fit Chi-Square statistics, and Chi-Square-to-Degrees-of-Freedom ratios were calculated (see Jöreskog & Sörbom, 1986, pp. I-39-41, and Hoelter, 1983). In addition to these, Tucker-Lewis coefficients (Tucker & Lewis, 1973) were calculated to indicate the proportion of common variance each model accounted for over and above the variance accounted for by a zero-factor model. Jöreskog and Sörbom have named this last measure a Goodness-of-Fit Index (GFI; 1986); a perfect fit between an observed covariance matrix and the covariance matrix predicted by a model would be indicated by a GFI value of 1.0. The values for all three measures of overall fit for each model are reported in Table 5, which appears on p. 377.

All eight models were compared by visually inspecting the measures of their overall fit to the obtained data. Model 4, the preferred or theoretical model, had the highest GFI (.85) and the lowest Chi-Square-to-Degrees-of-Freedom ratio (2.10), making it the best fitting model. The chief significance of this result was, of course, that the outcome of the CFA had validated the theoretical structure imposed on the BADIT by the author. It also needs to be pointed out, however, that although Model 4—the least parsimonious model—had the best relative fit of the eight models, in absolute terms, the magnitude of the GFI for Model 4 did not achieve the .90 to .95 range which is the current standard
Table 5

Measures of Overall Fit for Eight Measurement Models of BADIT Item Scales (N = 198)

<table>
<thead>
<tr>
<th>Model</th>
<th>Measure</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2/df$</th>
<th>GFI$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:</td>
<td>One Global Scale</td>
<td>522.40b</td>
<td>170</td>
<td>3.07</td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td>Beliefs About Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a:</td>
<td>BIOMEDICAL &amp; PSYCHOSOCIAL</td>
<td>388.14</td>
<td>169</td>
<td>2.30</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>Belief Orientation Scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2b:</td>
<td>ETIOLOGY &amp; TREATMENT</td>
<td>497.99</td>
<td>169</td>
<td>2.95</td>
<td>.77</td>
</tr>
<tr>
<td></td>
<td>Belief Content Scales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3a:</td>
<td>BIO/ETIO, BIO/TREAT &amp;</td>
<td>365.26</td>
<td>167</td>
<td>2.19</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>PSYCHOSOCIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3b:</td>
<td>BIO/TREAT, PSY/TREAT &amp;</td>
<td>399.14</td>
<td>167</td>
<td>2.39</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>ETIOLOGY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3c:</td>
<td>PSY/ETIO, PSY/TREAT &amp;</td>
<td>368.27</td>
<td>167</td>
<td>2.21</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>BIOMEDICAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3d:</td>
<td>BIO/ETIO, PSY/ETIO &amp;</td>
<td>455.16</td>
<td>167</td>
<td>2.73</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>TREATMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*4:</td>
<td>BIO/ETIO, BIO/TREAT,</td>
<td>344.30</td>
<td>164</td>
<td>2.10</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>PSY/ETIO &amp; PSY/TREAT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Preferred theoretical model

---

$^a$ Goodness-of-Fit-Index. Jöreskog and Sörbom describe this as a measure of the "relative amount of variances and covariances accounted for by the model" (1986; p. I-40). See Tucker and Lewis (1973) for more detailed description of the measure.

$^b$ All Chi-Square statistics significant at $p<.00005$. 

---
Figure 3. LISREL (VI) Standardized Maximum-Likelihood Solution for Preferred Four-Factor Measurement Model; \(X^2 (164, N = 198) = 344.30\)

* \(z = -1.15, p > 0.05\)
** \(z = -2.09, p < 0.05\)
*** \(z = -2.33, 0.01 < p < 0.05\)
Table 6

Items and Factor Loadings for the Preferred Four-Factor Model (N = 198),
(LISREL Estimates from a Standardized Solution)

<table>
<thead>
<tr>
<th>BADIT Items Grouped by Four Theoretical Scales, and Item Key Words</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIO/ETIO</td>
</tr>
<tr>
<td>BIOMEDICAL/ETIOLOGY</td>
<td></td>
</tr>
<tr>
<td>B11 (&quot;inherited disease&quot;)</td>
<td>.61</td>
</tr>
<tr>
<td>B27 (&quot;hormonal problems&quot;)</td>
<td>.57</td>
</tr>
<tr>
<td>B37 (&quot;biochemical imbalances&quot;)</td>
<td>.69</td>
</tr>
<tr>
<td>B45 (&quot;something like a blood disease&quot;)</td>
<td>.44</td>
</tr>
<tr>
<td>B50 (&quot;a gene responsible&quot;)</td>
<td>.63</td>
</tr>
<tr>
<td>BIOMEDICAL/TREATMENT</td>
<td></td>
</tr>
<tr>
<td>B1 (&quot;specially developed drugs&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B57 (&quot;the right medication&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B66 (&quot;readjust levels of brain substances&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B69 (&quot;like diabetes, controlled by medication&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B71 (&quot;the right medication&quot;)</td>
<td>--</td>
</tr>
</tbody>
</table>

* BIOMEDICAL/ETIOLOGY
b BIOMEDICAL/TREATMENT
c PSYCHOSOCIAL/ETIOLOGY
d PSYCHOSOCIAL/TREATMENT

* The convention "--" is used to indicate that the specified model fixed the value of these loadings at zero.
Table 6 Continued

Items and Factor Loadings for the Preferred Four-Factor Model (N = 198), (LISREL Estimates from a Standardized Solution)

| BADIT Items Grouped by Four Theoretical Scales, and Item Key Words | Factors |
|---|---|---|---|---|
| | BIO/ETIO<sup>a</sup> | BIO/TRT<sup>b</sup> | PSY/ETIO<sup>c</sup> | PSY/TRT<sup>d</sup> |
| **PSYCHOSOCIAL/ETIOLOGY** | | | | |
| B6 ("sinned and behaved immorally") | --* | -- | .32 | -- |
| B18 ("unless something goes wrong in life") | -- | -- | .42 | -- |
| B20 ("feeling...unlikeable or without worth") | -- | -- | .56 | -- |
| B30 ("a distorted way of looking and thinking") | -- | -- | .45 | -- |
| B42 ("important loss") | -- | -- | .26 | -- |
| **PSYCHOSOCIAL/TREATMENT** | | | | |
| B64 ("knowing that someone truly cares") | -- | -- | -- | .61 |
| B65 ("more pleasurable and rewarding environment") | -- | -- | -- | .54 |
| B67 ("talking over painful events") | -- | -- | -- | .59 |
| B68 ("talking about one's problems") | -- | -- | -- | .54 |
| B70 ("use inner strengths") | -- | -- | -- | .43 |

* BIOMEDICAL/ETIOLOGY
* BIOMEDICAL/TREATMENT
* PSYCHOSOCIAL/ETIOLOGY
* PSYCHOSOCIAL/TREATMENT

The convention "--" is used to indicate that the specified model fixed the value of these loadings at zero.
Table 7
Factor Intercorrelation Matrix for the Preferred Four-Factor Model (N = 198), (LISREL Estimates from a Standardized Solution)

<table>
<thead>
<tr>
<th></th>
<th>BIO/ETIO&lt;sup&gt;a&lt;/sup&gt;</th>
<th>BIO/TRT&lt;sup&gt;b&lt;/sup&gt;</th>
<th>PSY/ETIO&lt;sup&gt;c&lt;/sup&gt;</th>
<th>PSY/TRT&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO/ETIO&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO/TRT&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.79</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY/ETIO&lt;sup&gt;c&lt;/sup&gt;</td>
<td>-.13</td>
<td>-.25</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>PSY/TRT&lt;sup&gt;d&lt;/sup&gt;</td>
<td>.01</td>
<td>-.20</td>
<td>.48</td>
<td>1.00</td>
</tr>
</tbody>
</table>

<sup>a</sup> BIOMEDICAL/ETIOLOGY  
<sup>b</sup> BIOMEDICAL/TREATMENT  
<sup>c</sup> PSYCHOSOCIAL/ETIOLOGY  
<sup>d</sup> PSYCHOSOCIAL/TREATMENT
in the field for well fitting confirmatory factor models (F. B. Bryant, personal communication, October 5, 1989).

A figure showing the LISREL standardized maximum-likelihood solution for the initial specification of Model 4 appears on p. 378. It is followed immediately by Table 6 which gives the LISREL estimates for the item factor loadings for Model 4, and by Table 7 which gives the LISREL estimates for the Model 4 factor intercorrelation matrix. Because the LISREL program was set up to estimate the strength of the relationships among the specified factors after the unique measurement error associated with each indicator had been partialed out, readers should note that the values reported in Table 7 reflect relationships among "pure" factor constructs.

Before moving on to review the next stage of the CFA, it will be worthwhile to comment on a few of the more prominent results of the eight-way model comparison. First, it is quite clear that the multidimensional models provided a better fit than the one-factor model, indicating that there is complexity in the structure of individuals' illness beliefs about depression.

Second, after Model 4, the two, partially parsimonious models, Model 3a and Model 3c, provide the next best fit (GFI = .84). The more thoroughly parsimonious model, Model 2a, fit less well than these two. This finding suggests that even if one was guided solely by the aim of constructing a measure with parsimonious scale structure, beliefs
about depression have a sufficiently complex structure to require at least three common factors to adequately account for the meaningful variance. In other words, it seems that people do discriminate in some significant way between beliefs about etiology and those about treatment. However, the fact that both Models 3a and 3c provide virtually the same fit to the obtained data suggests that neither ideological belief orientation appears to benefit more than the other from having a scale which subsumes two domains of similarly-oriented belief content. In general, the comparable and relatively superior showing of Models 3a and 3c tends to support the idea which is reflected in the author’s theoretical model, namely, that belief orientation as opposed to belief content plays the more dominant role in differentiating the structure of illness beliefs about depression.

Third, the results of the model comparisons present convincing evidence to disconfirm the general hypothesis that illness beliefs about depression are bipolar in nature. To begin with, the factor loadings (the Lambda-x values) for the one-factor CFA solution did not conform to the complementary pattern one might have expected from a truly bipolar scale. Although the biomedically-oriented items loaded significantly and moderately well-to-strongly, in a positive direction, half of the psychosocially-oriented items were nonsignificant and the other half loaded no stronger than .26, albeit in a negative direction. While this did constitute a kind of bipolarity, in the strictest morphological
sense, the sharp difference between the way the two sets of ideologically-oriented items performed make it a bipolarity too substantively meaningless to interpret. Moreover, the models which challenged, in a less direct manner, the assumed unipolarity of ideological belief orientation, Models 2b, 3b, and 3d, did much less well in fitting the obtained data.

Step-wise Specification Search

A statistical criterion of relative overall fit will typically suffice for identifying the "best" confirmatory factor model among an array of compared models; in which case, the analysis proceeds with something akin to a fine tuning of that "best" model. Not infrequently, however, as was true with the present study, additional criteria must be employed in order to select the measurement model that most merits further specification.

Although Model 4, the preferred model, demonstrated the best relative fit of the eight compared models, four other measurement models were virtually indistinguishable from Model 4 in the goodness of their respective fits to the development sample data: Models 2a, 3a, 3b, and 3c. All five better fitting models had to be considered, then, in light of their parsimoniousness and their theoretical relevance.

---

2 In the context of this finding, it is possible to speculate that Model 3b provided a better fit than Model 3d because it allowed the putatively weak Psychosocial/Etiology scale to collapse into an "Etiology" scale.
As a two-factor model, Model 2a, was clearly the most parsimonious of the better fitting models. Moreover, its implied scale structure (Biomedical and Psychosocial) preserved the main theoretical emphasis of the author's intention to construct a scale to measure illness belief orientation. Had parsimony in measurement been valued as a greater good than theoretical articulation, Model 2a would have been the unquestionable candidate for further refinement. However, there was neither inherent nor convincing reason for parsimony to assume such a superordinate value; especially, where theory had played the preeminent role that it had in the development of the BADIT.

From its first conception, the author had been preoccupied by the need for a scale capable of registering the cognitive complexity which appears to characterize people's illness beliefs about depression. Of the better fitting models, only the four-factor model had the capacity to indicate several of the major distinctions which people appear to be inclined to make in their conceptualizations of depression. Only Model 4, for instance, implied a scale structure capable of accommodating the full distinctiveness of beliefs that ascribe the etiology of depression and endorse treatment methods for it across belief orientations—in other words, beliefs that "psychological" depressions (i.e., of psychosocial etiology) can be effectively treated with biomedically-styled interventions and that "biological"
depressions can be effectively treated with psychosocially-styled interventions.

Because parsimony did not offer enough of a motive to warrant sacrificing these cognitive distinctions, Model 4 was selected for the process of model enhancement through more refined specification. This process took advantage of the hypothesis testing capability of confirmatory maximum-likelihood factor analysis while utilizing the LISREL model in an exploratory manner in order to arrive at a more substantively and psychometrically precise specification of the preferred four-factor model.  

The modification of Model 4 was undertaken, principally, in order to improve its fit. The step-wise modification process itself, however, was motivated by two related but distinct objectives. The process was initially lead by a desire to see if the model could be further specified in such a manner as to more faithfully represent the theoretical constructs in which it originated and to amplify possible theoretical issues implied by the observed empirical structure. Secondarily, the specification search was lead by a simple concern with efficiency of measurement in which

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3 Though not used by the author, Jöreskog and Sörbom had actually developed model "modification indices" designed to make this second-stage use of CFA virtually automatic for users of their LISREL software program. Their endorsement of specification searches, however, was accompanied by the caveat that "it is recommended...only when relaxing a parameter makes sense from a substantive point of view and when the values of this parameter can be clearly interpreted" (1986, p. I.42).
Table 8

Goodness-of-Fit Chi-Square Statistics for Nested, Alternate Specifications of a Preferred Four-Factor Measurement Model of BADIT Item Scales (N = 198) with Difference of Chi-Square Tests for the Stepwise Implementation of Equality Constraints and Relaxation of Non-Contributory Phi Parameters

<table>
<thead>
<tr>
<th>Model Specification</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>( \Delta \chi^2 )</th>
<th>( \Delta df )</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model A (&quot;Preferred&quot;). Four Fully Oblique Common Factors</td>
<td>344.30</td>
<td>164</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model B. Model A with One Equality Constraint: ( \phi_{1,2} = \phi_{3,4} )</td>
<td>350.22</td>
<td>165</td>
<td>5.92</td>
<td>1</td>
<td>&lt;.025</td>
</tr>
<tr>
<td>Model C. Model A with One Equality Constraint: ( \phi_{1,3} = \phi_{2,4} )</td>
<td>344.53</td>
<td>165</td>
<td>.23</td>
<td>1</td>
<td>&gt;.50</td>
</tr>
<tr>
<td>Model D. Model C with Relaxation of Non-Significant (p&gt;.05) parameter ( \phi_{1,4} )</td>
<td>344.58</td>
<td>166</td>
<td>.05</td>
<td>1</td>
<td>&gt;.50</td>
</tr>
<tr>
<td>Model E. Model D with Relaxation of Just-Significant (p&lt;.01) parameter ( \phi_{2,3} )</td>
<td>350.71</td>
<td>167</td>
<td>6.13</td>
<td>1</td>
<td>&lt;.025</td>
</tr>
</tbody>
</table>

* Refer to Figure 2 on p. 372 for common factor labels.
the objective was to optimize the model's fitting function by trimming any noncontributory parameters.

The results of this second stage of the analysis are displayed in Table 8, which appears on the previous page. To minimize the possibility of confusion, the measurement models specified during this stage of the analysis were identified by alphabet letters. As it was initially specified, the best fitting model was identified as Model A as the starting point of sequential model testing, the same measurement model was re-identified as Model A.

Theoretical Amplification

The modification of the author's preferred, theoretical model (Model 4 in the eight model array) was first approached with a LISREL procedure intended to illuminate issues of substantive relevance. In two instances this was accomplished with hypothesis testing connected with the use of equality constraints. In these instances, two model parameters were constrained to be equal and a Difference of Chi-Square test was used to determine the impact of the equality constraint on model fit.

For ready comprehension of the descriptions of the two tests which follow, it is recommended that readers refer to Figure 2 on p. 372 and Figure 3 on p. 378. Figure 2 presents a schematic rendition of the initial, (maximum-likelihood) CFA specification of the preferred four-factor mea-
surement model. Figure 3 illustrates the standardized (maximum-likelihood) CFA solution for that model.

**Equality Constraint Test #1**

Although it had been postulated that similarly-oriented content domains should be, at least, moderately and positively correlated with one another, the theoretical base of the BADIT had not included any assumptions regarding the amount of variance that similarly-oriented content domains might share with one another. It was notable, therefore, to discover, in the solution for the initial specification of the theoretical model, that the biomedically-oriented content domains shared almost three times the amount of variance with one another (62.4%) than the psychosocially-oriented content domains shared with each other (23%). The phi coefficient for the common factor intercorrelation between BIO/ETIO and BIO/TREAT was .79, and the phi coefficient for the common factor intercorrelation between PSY/ETIO and PSY/TREAT was .48.

For its possible theoretical significance, then, it became salient to determine whether the difference in the relative magnitude of this pair of common factor intercorrelations was, in fact, a statistically significant one.

**Hypothesis**

It was held \( (H_0) \) that if the common factor intercorrelations which obtained between BIO/ETIO and BIO/TREAT and be-
tween PSY/ETIO and PSY/TREAT were of equivalent magnitude, then constraining them to be equal should not reduce overall model fit—that is, relative to the overall fit of the preferred four-factor model (Model A) which had been specified to allow all Phi parameters to be freely calculated. Conversely, it was held (H_A) that if both correlations were not of equivalent magnitude, then constraining them to be equal should reduce the fit of the newly specified model (Model B) relative to the overall fit of the preferred four-factor model which had been specified to allow all Phi parameters to be freely calculated.

A decision rule was formulated to a) reject the null hypothesis that there was no difference between the overall fits of models A and B, if the Difference of Chi-Square test was significant at the p<.05 level, and b) conclude that the pertinent Phi coefficients were not of equivalent magnitude and, therefore, that their respective parameters made unique contributions to the solution of the confirmatory factor model.

Test

A new version—Model B—of the theoretical model was specified in which the two (Phi) parameters representing the common factor intercorrelations between BIO/ETIO and BIO/TREAT and between PSY/ETIO and PSY/TREAT were constrained to be equal. These parameters were \( \phi_{1,2} \) and \( \phi_{3,4} \).
A LISREL analysis was performed on the respecified four-factor model, Model B, and the resulting Goodness-of-Fit Chi-Square was compared with the Goodness-of-Fit Chi-Square for Model A. The Difference of Chi-Square statistic for the comparison was 5.92 (1, N = 198), which was significant. It was concluded, therefore, that the magnitude of the common factor inter-correlations $\Phi_{1,2}$ and $\Phi_{3,4}$ were not equivalent and that retaining this difference in the specification of the four-factor model was necessary for reproducing the observed correlation matrix (associated with the confirmatory factor model) in a more faithful manner than could be achieved when these common factor intercorrelations were specified as equivalent. In operational terms, this equality constraint test failed to show cause for re-specifying the preferred four-factor model, Model A, at this step in the model modification process.

The results of this first test showed that there is an appreciably greater affinity between individuals' biomedically-oriented beliefs about the etiology of depression and the treatment of depression than there is between similar content domains of individuals' psychosocially-oriented beliefs. From a theoretical perspective, this finding raises a question compelling further investigation about what could explain the apparently greater independence of psychosocially-oriented illness beliefs about the etiology and treatment of depression. Is the independence related, for instance, to some aspect of deep cognitive structure embed-
ded in the culture, or is it a psychometric artifact--either of the sample dependence of this particular factor analytic study or of peculiarities in the BADIT?

Equality Constraint Test #2

One of the fundamental theoretical issues affecting the BADIT's structure had to do with the nature of the interaction between belief orientation and belief content or, in other words, the interaction between the ideological orientation of a belief and the subject matter with which it was concerned. The theoretical presumption was that the relationship between differing belief orientations should be essentially the same, regardless of whether the beliefs involved concerned the etiology of depression or its treatment.

Of the original group of eight models, the two two-factor models addressed this matter fully, the three-factor models to a lesser degree. However, due to the fact that the models were not nested, the Difference of Chi-Square test statistic could not be employed to contrast the overall fit of these different models in direct pairwise fashion, leaving the general question largely unresolved. The second equality constraint test was designed to overcome the aforementioned limitation and help resolve the question, as far as possible.

It was reasoned that one could, at least, partially elucidate the nature of the interrelation between belief
orientation and belief content by investigating whether the two domains of belief content had a differential impact on the relationship between biomedically-oriented and psychosocially-oriented beliefs.

There was additional inducement to test the equality of the parameters representing the relationship between differing belief orientations toward the same content. The standardized maximum-likelihood solution for Model A had shown that one of these parameters, \( \Phi_{1,3} \), was reflected in a common factor intercorrelation so small (\( -.13 \)) as to be non-significant (\( p > .05 \)), and the other, \( \Phi_{2,4} \), was reflected in a common factor intercorrelation so small (\( -.20 \)) as to be "just" significant (\( p < .05 \)). The fact that these parameters comprised a theoretically symmetrical pair, combined with the fact that they both demonstrated relative weakness, raised a substantive question regarding their contribution to model fit. If the absolute magnitude of the correlations involved were so slight, then, perhaps, that indicated that the kind of relationships represented by the respective parameters were superfluous to the model. The best way of investigating this question was to observe whether the common value assigned to \( \phi_{1,3} \) and \( \phi_{2,4} \), in a model constraining those parameters to be equal, was a statistically significant one.
Hypothesis

It was held ($H_0$) that if the intercorrelations that obtained between common factors which addressed the same content domain but differed in ideological orientation, viz. the intercorrelation between BIO/ETIO and PSY/ETIO and that between BIO/TREAT and PSY/TREAT, were of equivalent magnitude, then constraining them to be equal should not reduce overall model fit--that is, relative to the overall fit of the preferred four-factor model (Model A) which had been specified to allow all Phi parameters to be freely calculated. Conversely, it was held ($H_A$) that if both intercorrelations were not of equivalent magnitude, then constraining them to be equal should reduce the fit of the newly specified model (Model C) relative to the overall fit of the preferred four-factor model which specified that all Phi parameters were free to be calculated.

Two decision rules were formulated in conjunction with the second equality constraint test. The first and primary rule was to a) reject the null hypothesis that there was no difference between the overall fits of models A and C, if the Difference of Chi-Square test was significant at the $p \leq .05$ level, and b) conclude that the Phi coefficients involved were not of equivalent magnitude and, therefore, their respective parameters made unique contributions to the solution of the confirmatory factor model.

A secondary decision rule, contingent on failure to reject the null hypothesis, was to regard the contribution
made by the parameters in question as necessary to the best specification of the four-factor measurement model, if the \( z \)-value\(^4\) of the shared parameter estimate was significant at the \( p \leq .05 \) level.

Test

A new version--Model C--of the theoretical model was specified in which the two (Phi) parameters representing the common factor intercorrelations between BIO/ETIO and PSY/ETIO and between BIO/TREAT and PSY/TREAT were constrained to be equal. These parameters were \( \phi_{1,3} \) and \( \phi_{2,4} \).

A LISREL analysis was performed on the respecified four-factor model, Model C, and the resulting Goodness-of-Fit Chi-Square was compared with the Goodness-of-Fit Chi-Square for Model A. The Difference of Chi-Square statistic for the comparison was 0.23 (1, \( N = 198 \)), which was not significant (\( p > .50 \)). It was concluded, therefore, that the magnitude of the common factor inter-correlations \( \phi_{1,3} \) and \( \phi_{2,4} \) were essentially equivalent, and that the found difference in the magnitude of these correlations did not contribute to a significantly different reproduction of the observed correlation matrix (associated with the confirmatory factor model) than that matrix which was reproduced when these common factor intercorrelations were specified as equivalent. This meant that the four-factor confirmatory

\(^4\) The LISREL program reports parameter estimates which are divided by their standard errors as "\( t \)-values" (Jöreskog & Sörbom, 1986, p. III.12), but they actually have the distribution of \( z \)-statistics (Gorsuch, 1983, p. 131).
factor model could be respecified in a more theoretically appropriate direction if this parity were considered. In operational terms, this equality constraint test showed cause for respecifying the preferred four-factor model, Model A, in the fashion represented by Model C.

The LISREL standardized maximum-likelihood solution for confirmatory factor model C showed that the estimated value shared by both \( \Phi_{1,3} \) and \( \Phi_{2,4} \) was -.17. The \( z \)-value for this interfactor correlation was -2.17 which was significant at the \( p<.05 \) level. It was concluded, therefore, that although the two parameters which represented the relationships between differing belief orientations to the same content did not make unique contributions to the solution of the confirmatory factor model, they explained just enough variance in the measurement of illness beliefs about depression to require their retention in the specification of a four-factor BADIT measurement model.

In theoretical terms, one should conclude from this equality constraint test that the same slightly negative relationship obtained between differing ideological belief orientations whether the beliefs in question concerned the etiology of depression or its treatment. As previous model tests indicated, people do seem to discriminate between beliefs about etiology and those about treatment but the present finding makes clear that such discriminations do not

---

5 This value was not significant at the \( p<.01 \) level, however.
appear to have as significant an impact on the relationship between common factors as do differences in ideological orientation. In other words, the finding suggests that within the preferred confirmatory factor model for measuring illness beliefs about depression, the topical content of beliefs does not uniquely contribute to the intercorrelation of common factors of differing ideological orientation. The more dominant dimension in illness beliefs about depression, then, appears to be the dimension in which perceived controllability is keyed, the ideological orientation of the beliefs.

Measurement Efficiency

Testing the equivalence of several model parameters had made it possible to both satisfy some theoretical concerns and respecify the four-factor model. This led the way toward making the preferred confirmatory factor model as efficient as possible in its measurement. The first step in this direction was to consider the effect on model fit of relaxing apparently non-contributory parameters.

Model Trim #1

The standardized maximum-likelihood solution for Model C showed that the strength of the relationship between BIO/ETIO and PSY/TREAT, represented by the parameter \( \Phi_{14} \), was reflected in an extremely small common factor intercorrelation of .02 which was nonsignificant (\( p > .05 \)). As there
was no substantive reason for calculating this parameter, an hypothesis test was carried out to determine whether Model D, a respecification of Model C in which parameter \( \Phi_{14} \) was relaxed, could provide as good a fit to the development sample data as had Model C.

A decision rule was formulated to reject the null hypothesis that there was no difference between the respective fits of Models C and D, if the Difference of Chi-Square for the models was significant at the \( p \leq .05 \) level. A LISREL analysis was performed on the respecified four-factor model, Model D, and the resulting Goodness-of-Fit Chi-Square was compared with the Goodness-of-Fit Chi-Square for Model C. The Difference of Chi-Square statistic for the comparison was 0.05 \((1, N = 198)\), which was not significant \((p > .50)\).

Because it had been possible to respecify Model C by relaxing \( \Phi_{14} \), without causing a deterioration in overall model fit, it was concluded that the parameter \( \Phi_{14} \) was unnecessary in the model. Further, it was concluded that a respecification of the preferred four-factor model in the manner of Model D would simultaneously provide more efficient measurement and a more parsimonious theoretical model of BADIT measurement.

**Model Trim #2**

The next logical step toward modifying the four-factor model was to consider relaxing the parameter \( \Phi_{23} \), which, from a substantive point of view, was the complement of
Phi<sub>1,4</sub>. As with Phi<sub>1,4</sub>, there was no theoretical motive for including an estimate of the relationship between the common factors BIO/TREAT and PSY/ETIO, in the preferred four-factor model. Secondly, the standardized maximum-likelihood solution for Model D had showed that, of the remaining single parameters, Phi<sub>2,3</sub> was reflected in the smallest common factor intercorrelation (-.27). Although small, the z-value for the coefficient Phi<sub>2,3</sub> was significant (p<.01).

Despite the statistical significance of Phi<sub>2,3</sub>, an hypothesis test was carried out to determine whether Model E, a respecification of Model D in which parameter Phi<sub>2,3</sub> was relaxed, could provide as good a fit to the development sample data as had Model D. This test was performed in order to insure that the specification search had been exhausted; at least, as far as phi parameters were concerned.

A decision rule was formulated to reject the null hypothesis that there was no difference between the respective fits of Models D and E, if the Difference of Chi-Square for the models was significant at the p<.05 level. A LISREL analysis was performed on the respecified four-factor model, Model E, and the resulting Goodness-of-Fit Chi-Square was compared with the Goodness-of-Fit Chi-Square for Model D. The Difference of Chi-Square statistic for the comparison was 6.13 (1, N = 198), which was significant (p<.025).

6 The shared value of the common factor intercorrelations for Phi<sub>1,3</sub> and Phi<sub>2,4</sub> was actually smaller in magnitude (-.18), but because both parameters had been specified as equal, they would have had to have been relaxed at once.
Because it had not been possible to respecify Model D by relaxing Phi$_{2,3}$, without also causing a deterioration in overall model fit, it was concluded that the parameter Phi$_{2,3}$ accounted for enough variance to warrant retention in the BADIT measurement model.

**Final Specification of the Preferred Four-Factor Model**

After a second attempt to trim the preferred four-factor model had proven unsuccessful, it was concluded that, of the five alternate four-factor models tested, Model D provided the best fit to the development sample data. This conclusion dictated that the final specification of the BADIT measurement model should be the specification represented by Model D.

The final specification of the four-factor confirmatory factor model is schematically rendered in Figure 4 which appears on p. 401. It is followed immediately by Figure 5 which shows the LISREL standardized maximum-likelihood solution for it. The Goodness-of-Fit-Index for the finally specified version of the preferred measurement model was .85, and the ratio of Chi-Square-to-Degrees-of-Freedom was 2.08.

LISREL estimates for the item factor loadings for the final specification of the BADIT measurement model are displayed in Table 9, on pp. 403-404. Table 10, which follows immediately, gives the LISREL estimates for the factor intercorrelation matrix of the finally specified model.
Figure 4. Finally Specified Confirmatory Factor Model for Measuring Beliefs About Depression and Its Treatment: Four Partially Correlated Common Factors, With Two Phi Parameters Constrained to be Equal, and Uncorrelated Error Factors [Model D]
Figure 5. LISREL (VI) Standardized Maximum-Likelihood Solution for Finally Specified Four-Factor Measurement Model; $X^2 (166, N = 198) = 344.58$

* $z = -2.93, p < .01$
Table 9

**Items and Factor Loadings for the Finally Specified Four-Factor Model**
(N = 198). (LISREL Estimates from a Standardized Solution)

| BAdIT Items Grouped by Four Theoretical Scales, and Item Key Words | Factors |
|---|---|---|---|---|
|  | BIO/ETIO<sup>a</sup> | BIO/TRT<sup>b</sup> | PSY/ETIO<sup>c</sup> | PSY/TRT<sup>d</sup> |
| **BIOMEDICAL/ETIOLOGY** |  |  |  |  |
| B11 ("inherited disease") | .61 | --<sup>*</sup> | -- | -- |
| B27 ("hormonal problems") | .57 | -- | -- | -- |
| B37 ("biochemical imbalances") | .69 | -- | -- | -- |
| B45 ("something like a blood disease") | .44 | -- | -- | -- |
| B50 ("a gene responsible") | .64 | -- | -- | -- |
| **BIOMEDICAL/TREATMENT** |  |  |  |  |
| B1 ("specially developed drugs") | -- | .51 | -- | -- |
| B57 ("the right medication") | -- | .46 | -- | -- |
| B66 ("readjust levels of brain substances") | -- | .71 | -- | -- |
| B69 ("like diabetes, controlled by medication") | -- | .77 | -- | -- |
| B71 ("the right medication") | -- | .40 | -- | -- |

<sup>*</sup> The convention "---" is used to indicate that the finally specified model fixed the value of these loadings at zero.
Table 9 Continued

Items and Factor Loadings for the Finally Specified Four-Factor Model (N=198). (LISREL Estimates from a Standardized Solution)

<table>
<thead>
<tr>
<th>Items Grouped by Four Theoretical Scales, and Item Key Words</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIO/ETIO</td>
</tr>
<tr>
<td><strong>PSYCHOSOCIAL/ETIOLOGY</strong></td>
<td></td>
</tr>
<tr>
<td>B6 (&quot;sinned and behaved immorally&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B18 (&quot;unless something goes wrong in life&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B20 (&quot;feeling...unlikeable or without worth&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B30 (&quot;a distorted way of looking and thinking&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B42 (&quot;important loss&quot;)</td>
<td>--</td>
</tr>
<tr>
<td><strong>PSYCHOSOCIAL/TREATMENT</strong></td>
<td></td>
</tr>
<tr>
<td>B64 (&quot;knowing that someone truly cares&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B65 (&quot;more pleasurable and rewarding environment&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B67 (&quot;talking over painful events&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B68 (&quot;talking about one’s problems&quot;)</td>
<td>--</td>
</tr>
<tr>
<td>B70 (&quot;use inner strengths&quot;)</td>
<td>--</td>
</tr>
</tbody>
</table>

* BIOMEDICAL/ETIOLOGY
b BIOMEDICAL/TREATMENT
c PSYCHOSOCIAL/ETIOLOGY
d PSYCHOSOCIAL/TREATMENT

* The convention "--" is used to indicate that the finally specified model fixed the value of these loadings at zero.
Table 10

Factor Intercorrelation Matrix for the Finally Specified Four-Factor Model (N = 198), (LISREL Estimates from a Standardized Solution)

<table>
<thead>
<tr>
<th></th>
<th>BIO/ETIO^a</th>
<th>BIO/TRT^b</th>
<th>PSY/ETIO^c</th>
<th>PSY/TRT^d</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO/ETIO^a</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO/TRT^b</td>
<td>.80</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY/ETIO^c</td>
<td>-.18</td>
<td>-.27</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>PSY/TRT^d</td>
<td>0.00</td>
<td>-.18</td>
<td>.48</td>
<td>1.00</td>
</tr>
</tbody>
</table>

^a BIOMEDICAL/ETIOLOGY
^b BIOMEDICAL/TREATMENT
^c PSYCHOSOCIAL/ETIOLOGY
^d PSYCHOSOCIAL/TREATMENT
CHAPTER VIII.

DISCUSSION

The psychometric effort to develop the BADIT, described in the second part of this dissertation, was undertaken in the spirit of a demonstration project, with two principal objectives in mind. The first objective was to show how one could assess beliefs about depression in a manner consonant with the author's theoretical model of belief-mediated response to depression. This model was grounded in a cognitive-anthropological perspective not incorporated in existing approaches to either the phenomenon of depression or its treatment. The second objective was to provide a sound starting point for the development of the BADIT as a practical clinical tool for use in effectively matching depressed persons with the mode of treatment for depression from which they would be likely to derive the most benefit.

The signal achievement of the psychometric project was that a maximum-likelihood confirmatory factor analysis (CFA) showed that the theoretical structure imposed on the BADIT was empirically valid. In particular, this meant that illness beliefs about depression a) conformed to methods of unipolar scaling, and b) were differentiated in terms of their biomedical or psychosocial orientation. There was, in addition, some limited confirmation that illness beliefs...
about depression are differentiated in terms of their content focus, i.e., whether they pertain to etiology or treatment. In light of these results, it was the author's impression that both of his principal objectives were accomplished.

As a scalar device, however, the BADIT\(^{1}\) far from exemplified ideals of psychological measurement. Weaknesses and limitations related to both items and scale structure were pointed up by preceding analyses, and these will be discussed below.

**Scope of Discussion**

The balance of this chapter is devoted to an examination of three different kinds of issues, with a separate section devoted to each. In the first section, I will discuss five main findings from the empirical studies of the BADIT which require either some additional interpretation or amplification. A major thrust of the first section involves plausible explanations for unanticipated results. A number of these explanations are based on consideration of various threats to the empirical validity (see Neale & Liebert, 1980, Footnote 4, p. 111) of the main findings.

As part of an initial effort to develop the BADIT, several essentials of scale development were not addressed by

\(^{1}\) That is, the 20-item, Revision 2 BADIT. All remaining references to the BADIT, unless otherwise specified, will be to the Revision 2 BADIT.
this dissertation. In the second section of this chapter, therefore, by way of addressing these unmet psychometric needs, I will make some recommendations for future study. In the concluding third section, I will illustrate the diverse utility of the BADIT by highlighting a few of its more promising potential applications.

Interpretation of Major Findings

Substandard Fit of CFA Models

Despite their clear theoretical significance, the results of the confirmatory factor analysis were nonetheless disappointing with respect to the absolute statistical fit of the four theoretically preferred measurement models, the belief orientation models\(^2\). With Goodness-of-Fit Indexes (GFI) observed between .83 and .85, this group of relatively best fitting models fell short of prevailing expectations that well-fitting CFA models will have GFIs which exceed .90 (see Cole, 1987, p. 586).

As important as the results themselves, it is important to know the most probable cause(s) of this pattern of substandard model fits. Did models fit poorly primarily because theoretical inadequacies led to less than optimal domain sampling and/or specification of models? Or, did they

\(^2\) Models 2a, 3a, 3c, and 4; for a description of these models see Chapter VII, pp. 367-375.
fit poorly primarily because of factors associated with measurement error?

An exploratory factor analysis would be an excellent diagnostic procedure to employ for the purpose of trying to determine the underlying nature of the subpar fit of the CFA models. The CFA forced items to load on only one specified common factor, and items with low loadings were taken to be poor indicators of that particular latent construct. By allowing items to load on more than one factor, an exploratory factor analysis would help to reveal, through a pattern of factor loadings, the kind of latent construct that a low-loading item from the CFA was really reflecting in the context of the obtained data. This procedure might help to identify an additional factor or factors which could account for some of the meaningful but unexplained variance in the present analysis.

However, in the absence of this kind of data to help evaluate the soundness of the theoretical scheme, measurement error seems to have been the most plausible cause of the substandard fit of the belief orientation models. Generally, it appears that the measurement of illness beliefs about depression was contaminated by the measurement of a number of uncontrolled sources of contingent variance, such as the effects of: the total test "environment", test length, individual response sets, and a response set which was connected to sample selection. The inclusion of artifactual variance in BADIT measurement attenuated corre-
lations, which had the consequence of obscuring the effects of important relationships represented in the various belief orientation models.

**Total Test "Environment" and Test Length**

One need recall that respondents' test behavior was shaped by a total questionnaire environment of 72 items. Implicit in this environmental effect was the unknown influence of 22 items written for two trial scales subsequently excluded from any of the analyses. Though difficult to gauge exactly what effect the presence of all 72 items had on respondents, one can safely assume that the notion of simulated revisions, which was an operational assumption of all the BADIT data analyses, was a flawed if highly functional one. It is hard to imagine, for example, that development sample subjects would have offered the same responses to the 20 items of a 20-item BADIT that they offered when those same 20 items were embedded in the original 72-item BADIT questionnaire.

In further considering the impact of the original questionnaire, one must also reckon with the possibility that, with an eight-page questionnaire, fatigue could have adversely influenced the attempt to accurately and dependably measure respondents' beliefs. Although not necessarily associated with fatigue, the results indicated that some kind of end-of-questionnaire clustering effect did take place.
Eight out of all 10 treatment-related items on the second revision BADIT came from the last nine items of the original questionnaire (B64 to B71). Because there were 10 more treatment items than etiology items (30 vs. 20) on the original questionnaire, treatment items were presented in closer relation to one another at the end of the questionnaire form than elsewhere. It is doubtful, however, whether this closer spacing could have been solely responsible for the end-of-questionnaire clustering. A more technically sophisticated specification of the theoretical four-factor CFA model might help to shed light on this question. The model could be specified so that all those treatment items appearing on the last two pages of the questionnaire would have correlated error factors, i.e., in order to represent the operation of a questionnaire-page effect.

**Individual Response Sets**

It has been well established that systematic individual differences in test-taking behavior constitute distinct and reliable sources of variance (see discussion of response sets in Nunnally, 1978, pp. 658-672). Being independent of the attributes intended for measurement, these stylistic variables are artifacts of measurement method which can distort results. After carefully reviewing the original BADIT questionnaire and the sample to which it was administered, it appeared that BADIT measurement might have been affected by several types of response sets.
Social Desirability

Because illness beliefs about depression were presented in the BADIT as universalized propositions, it was assumed that no particular pattern of item endorsement should have been more indicative of socially desirable responding than another. In retrospect, however, the question arises as to whether biomedically-oriented beliefs are perceived as more socially desirable than psychosocially-oriented ones in North American culture because of the high status accorded the medical profession and because of the generally heightened cultural valuation of things scientific. A simple empirical check on this matter could be achieved with the parallel administration of the BADIT and a social desirability scale\(^3\), followed by an analysis of Pearson correlations between the social desirability scores and the four theoretical BADIT scales.

Random and Faked Responses

When the BADIT questionnaire was originally constructed for administration to a development sample, special items known to be infrequently endorsed in the general population\(^4\) were not interspersed among "true" items. This practice, customarily employed to provide a measure of possible random

\(^3\) For example, the "Desirability" scale from the Jackson Personality Research Form (Jackson, 1967).

\(^4\) Items such as "I have never seen an apple"--taken from the "Infrequency" scale of the Jackson Personality Research Form (Jackson, 1967).
or faked responding, was not instituted because neither the face content of the BADIT items nor the anticipated composition of the respondent group immediately aroused suspicion that inauthentic responding was likely to take place. Hindsight suggests, however, for reasons amplified below, that it would, indeed, have been helpful to have had a check on the occurrence of random or fake responding in the BADIT development sample.

Neutral and Extreme Response Styles

If significant numbers of development sample subjects had consistently used either neutral or extreme anchor points on the BADIT’s 7-point response scale, it would also have frustrated the attempt to obtain true measurement of their beliefs about depression. Relationships of interest would have become "washed out" or submerged in BADIT records containing a great number of neutral responses, and records in which extreme response tendencies had been expressed in predominantly one direction would have skewed results and obscured more meaningful sources of variance. Although such response tendencies were possible sources of irrelevant variance, analyses were not performed to determine the extent to which they may have exerted a distorting influence on the obtained data. It was reasoned instead that it would be more efficient to invest new energies in collecting additional development data in a manner incorporating some of the controls discussed here.
Sample Dependence

Basic questions arise concerning the generalizability of the findings obtained with the development sample\(^5\). Notwithstanding previously cited measurement problems, is there any reason to believe that the CFA models would have provided a better fit to data collected from a substantially different group of psychiatrically normal subjects taken from the general public? Was there something peculiar to the characteristics of the development sample and the manner in which it was drawn which predisposed subjects to a common and identifiable response set? Namely, did the fact that the sample was made up of college students desiring extra course credit--students who may have been bored and uninterested in the subject matter and indifferent to the need for thoughtful and honest responses--contribute so much "noise"?

\(^5\) There is a slight confusion here about whether the development sample subjects technically constituted a sample or a population in the different senses those terms have in statistical theory. For all intents and purposes, development sample subjects functioned as a sample drawn from a larger population of psychiatrically normal subjects in the general public. The maximum-likelihood estimates for the CFA solutions, however, were based on population parameters. Issues of generalizability concerning results from the present study are conceptualized differently depending on whether the results are considered as findings from a sample or findings about a population. If they are findings from a sample, then the results need to be examined in terms of their representativeness, or their generalizability to the population from which they were drawn. If they are findings about a population, the results need to be examined in terms of their generalizability to other populations of interest. For the remainder of this chapter, the author will refer to the group of respondents as a sample.
to BADIT measurement that the presence of meaningful, structural relations in the obtained data were lost or distorted?

It could be reasonably speculated that many of the development sample subjects had signed up for extra course credit out of a perceived need to do so, that is, because of poor course performance, e.g., low mid-term grades, etc. It will be recalled that none of the developmental sample subjects were psychology majors, and only 2% of the sample indicated so much as an intention to major in psychology. One could infer from this that the development sample was composed of college undergraduates with little ostensible interest in psychology. Given a lack of identification with the general project of psychological research, and given a lack of specific or intrinsic interest in the BADIT's subject matter, it would be reasonable to assume that a certain degree of careless, if not actually random, responding may have contaminated the measurement.

Another factor quite possibly at work with this sample was related to the fairly high demand level of the task represented by the 72-item BADIT. In addition to being challenging because of its length, the BADIT items required respondents to search out and contemplate their beliefs on a matter about which they may not have given much prior thought. The demands of the situation, therefore, may have induced many subjects—even conscientious ones—to resort to "guessing" about their own previously unreflected on beliefs. As sources of meaningless variance, both guessing
and random responding could have caused the preferred, belief orientation models to fit poorly.

Lastly, as comparably aged, non-depressed undergraduates, development sample subjects were grossly homogeneous. This sample homogeneity should have had the effect of reducing overall variability, thereby attenuating correlations and reducing the likelihood of obtaining good model fits.

Considering that the reported development sample data are the only empirical observations of the BADIT, it will be critical to investigate the hypothesis that peculiarities in the development sample were responsible for the very modest outcome of the present CFA study. In order to test this sample-dependence hypothesis, the BADIT will need to be administered to a) other, similarly comprised samples and b) differently defined samples.

Relative Comparable Fit of Five Models

Apart from the already considered question of why the group of orientation belief models did not provide a better absolute fit to the obtained data, there remains the more pointed question of why the preferred, 4-factor model did not do significantly better in fitting the data than any of

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6 No data were collected regarding the racial and ethnic background of the subjects. Extrapolating from the general composition of the student body at the University of Illinois at Urbana-Champaign, however, one can suppose that the subjects were also racially and ethnically similar.
the other "better fitting models". How is it that the most parsimonious (Model 2a) and the least parsimonious (Model 4) versions of essentially the same theoretical model for the measurement of illness belief orientation with respect to depression provided nearly identical fits (.83 vs. .85)? With theory having played such a dominant role in specifying the preferred, 4-factor measurement model, should it not have performed much better, in relative terms?

While this result can be partially explained by the kinds of measurement problems previously cited, it seems more probably the case that the aforementioned matter of sample dependence played the decisive role here. Simply put, the content domain distinctions, etiology and treatment, were not as powerful in the minds of development sample subjects as had been expected. On the other hand, there was something functionally referential and familiar about the BADIT's biomedical and psychosocial ideological dimensionality which lead subjects to validate the general theoretical structure of illness belief orientation.

Etiology and treatment content distinctions may only be salient for mental health professionals who have recourse to them in their work. Or possibly, such distinctions are only more widely evident to individuals who have greater expo-

7 This group of "better fitting models" consisted of all the models with GfIs of .83 or better. These were the four orientation belief models and Model 3b, a 3-factor model with two ideologically oriented treatment factors and a factor which collapsed across Etiology.
sure, for one reason or another, to the phenomenon of depression. It will be recalled that only 27% of the development sample reported that either they or someone they knew closely had been treated for depression. Administering the BADIT to a sample of mental health professionals should provide a test of whether the relative fit of the more and less parsimonious theoretical models is founded on the experience base, or sophistication with depression, of the respondent group.

Interpreting Equality Constraint Test #1

During the model modification phase of the CFA, two equality constraint tests were used to aid in further specifying the 4-factor theoretical model. The first of these tests revealed that beliefs about etiology and treatment were more highly correlated within a context of biomedically-oriented beliefs than they were within a context of psychosocially-oriented ones. Was this result due to imprecise measurement and sampling peculiarities or was it due to meaningful differences in the way that people in our culture conceptualize depression as an illness?

The significantly stronger relationship between biomedically-oriented beliefs about etiology and treatment than that found between psychosocially-oriented beliefs about the same topics can be regarded in more than one light. The simplest explanation of the difference is that it was primarily a psychometric artifact of the amount of measurement
error associated with the Psychosocial/Etiology scale, compounded by the comparatively restricted variance associated with Psychosocial/Treatment scale scores—the most restricted of all 4 BADIT scales. Far less simple, but perhaps more worthy of attention is the explanation that the difference was substantive, being attributable to the way in which individuals' cognition about depression is organized at a cultural level. According to this alternative explanation, the difference in the magnitude of the interfactor correlations reflects the fact that, in our culture, when depression (as an illness) is considered from a biomedical perspective, beliefs about its etiology and treatment are more closely related to one another then when it is considered from a psychosocial perspective.

In general, it seems that the biomedical cognitive set is more inherently homogeneous and more ideologically monolithic than the psychosocial one, and this dissimilarity is most pronounced in regard to the relationship between etiology and treatment. Biomedical etiologies of depression imply biomedical treatment in a far more rigidly prescriptive manner than psychosocial etiologies imply psychosocial treatment, as is plainly evident in the area of clinical practice. When depression is alleged to be "biochemical" (in etiology), a biomedical treatment is prescribed as a matter of course; on occasion, a psychosocial treatment may

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8 See Table 3, p. 358.
be prescribed as an adjunctive therapy. When psychosocial factors are held to be responsible for depression, on the other hand, psychosocial treatment methods are infrequently prescribed in so automatic a fashion.

One reason for this differentiation of the cognitive domain about depression is that biomedical etiologies follow a straightline reductionism which admits little if any doubt about the "true", underlying cause of depressive disorder. By contrast, in the psychosocial world, etiology is typically represented as both multifactorial and as tied to more than one meaningful level of expression (e.g., levels of functional autonomy or operant conditioning vs. the level of essential cause). In addition, by virtue of the studied ambiguity which is a stock feature of psychosocial cognition, psychosocial causes are seldom attributed with the kind of scientistic certitude which marks biomedical deliberation.

Another factor which determines the relative lack of latitude in the prescription of biomedical treatment for depression is that, although there may be many different antidepressant compounds, there are actually very few discrete therapies in use for treating depression biomedically 9. Again, in the psychosocial world, the situation is sharply contrasting.

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9 Aside from drug therapy, there are: milieu therapy or hospitalization, phototherapy, and electroconvulsive therapy.
In the first place, one needs note that the bias in North American culture toward biomedical treatment makes it probable that individuals will have biomedical treatments prescribed for their depressions irrespective of putative etiology. But, even in those instances in which ascribed psychosocial etiology calls for psychosocial treatment, the fact that there are over 250 recognized varieties of psychotherapy alone (Meredith, 1986, p. 32) makes the notion of formulistic prescription of psychosocial treatment a completely senseless one.

In sum, it is highly plausible that: a) the greater separation of etiologic and therapeutic concepts in the psychosocially-oriented approach to depression accounted for significantly greater independence of the Psychosocial/Etiology and Psychosocial/Treatment scales; and b) the much closer linkage of etiologic and therapeutic concepts in the biomedically-oriented approach to depression accounted for a significantly greater observed relationship between the Biomedical/Etiology and Biomedical/Treatment scales.

Weakness of the Psychosocial/Etiology Scale

The Psychosocial/Etiology (PSY/ETIO) scale had a coefficient alpha of .48, indicating an unacceptably low level of internal consistency. This conspicuous lack of cohesiveness among PSY/ETIO scale items should be regarded as evidence that PSY/ETIO is not a unidimensional factor. Viewed thus, the lack of cohesiveness suggests that
"psychosocially-oriented beliefs about the etiology of depression" may be too broad and too highly variegated a cognitive domain to have been capable of possessing validity as a unitary and practicably measurable construct.

A careful examination of the items comprising the Psychosocial/Etiology (PSY/ETIO) scale discloses nothing obviously or systematically different in language and phrasing than holds true for the items comprising the three other BADIT scales. What is salient about the PSY/ETIO scale, however, is that the psychosocially-oriented beliefs about the etiology of depression are not coherently organized around a single conceptual principle as the biomedically-oriented beliefs about etiology (Biomedical/Etiology) are neatly organized around the reductionist principle of biochemical determinism.

As was previously discussed, the psychosocial realm is generally much more diffuse and heterogeneous than the biomedical realm. Specifically, with respect to etiology, psychosocially-oriented beliefs can be organized according to a near myriad of principles. For instance, psychosocial conceptions of the etiology of depression can take shape around psychodynamic, behavioral, mental hygiene, cognitive behavioral, spiritual (including "new age" and conventional religious varieties), nativist (sometimes called "traditional"--allows for the influence of supernatural agencies such as the "evil eye"), and neoclassical (see Rippere, 1980f) principles, to name just a few.
Given such a highly differentiated cognitive base, it seems more than likely that with just five items—or even ten (as with Revision 1)—one could not construct a scale of psychosocially-oriented illness beliefs about the etiology of depression which could be sufficiently well defined to perform reliably and yield meaningful measurement. A strategy to use in exploring, and perhaps rectifying, this kind of problem in construct representation would be to generate new items for the purpose of constituting several cogently defined subfactors of psychosocially-oriented etiology.

Test-Retest Coefficients

Test-retest coefficients for BADIT scale scores were computed from a retest study "of convenience" on 31% of the development sample, following a 6-week test interval. Three of the retest coefficients ranged from .62 to .70, while a fourth coefficient, for the PSY/ETIO scale, was .41. As was mentioned in Chapter VI, there were problems in interpreting these coefficients in terms of reliability. It was unclear whether observed changes in retest scale scores had been due: a) mainly to true change, i.e., change in illness beliefs; b) mainly to error measurement; or c) to true change plus measurement error in roughly equivalent amounts. In considering the results further, two points need to be made. The first bears on the overall validity of the results.

The reliability coefficients obtained from the 60-subject subsample of the development sample are of highly ques-
tionable empirical validity because the subsample was not representative of the total sample from which it was drawn. It will be recalled that the retest sample was comprised of students who had not been otherwise able to meet a course requirement for research participation. By definition, retest sample subjects were expressly unlike their fellow classmates (i.e., other development sample subjects) by dint of having been either too busy, too uninterested in research, or too unmotivated to have participated in enough regularly scheduled research during the semester to fulfill their course credit requirement in another way. It must be assumed, therefore, that systematic bias in the selection of the retest sample invalidated the retest findings. This problem could have been avoided if the entire original sample had been retested.

Despite the invalidity of the findings, it will be instructive to briefly consider the question of retest interval as it relates to the BADIT. As a retest data collection of convenience, the retest interval for the present study was determined without the author’s input, and this created some difficulties in making sense of the relative magnitudes of the correlated scale scores and what they signified. Had I been free to set it, however, what would have been an appropriate interval to have selected, given the nature of the BADIT and the present study? Although there is no simple answer to this question, it is clear that intuition, introspection, theorizing and other such inductive methods are
not, in themselves, sufficient for arriving at an appropriate retest interval.

Nunnally, who eschews the retest method of estimating the reliability of psychological measures (1978, pp. 233-234), identified a 2-week interval as the length of time necessary "to permit short-range fluctuations in abilities and personality characteristics to be manifested", and 6 months as the typical length of time necessary for evaluating the long-range stability of scores (pp. 234-235). He added, however, the strong emphasis that, when assessing the stability of "relatively enduring" attributes, an interval should be used which makes sense in terms of the practical purposes the scores will ultimately serve. In other words, an interval should be selected that enables one to test whether scores remain stable over the period of time in which they are employed, otherwise measurement error will erode the validity of whatever decisions are made on the basis of those scores.

Nunnally’s externally-related approach for determining retest interval length is sound and prudent but not without its drawbacks. For instance, if one were contemplating use of the BADIT as a clinical tool to help match depressed people with the mode of treatment from which they would be likely to derive the greatest benefit, then, a minimal, externally-related retest interval would be the estimated length of time from pretreatment assessment to initial treatment response. Fixing that retest interval so that it
could accommodate responses to both psychotherapeutic and pharmacotherapeutic treatment modes, however, would be far more cumbersome than Nunnally's straightforward dictum appears to suggest.

Given a more general interest in BADIT measurement, the best gauge for an appropriate retest interval would likely be found in research reports on the stability of similar or analogous kinds of beliefs. In all events, a third tack for discovering an appropriate retest interval would be the empirical method of multiple retest studies, each employing a different interval length. An analysis of the resulting data sets would enable one to successfully interpolate the appropriate interval for evaluating the stability of the BADIT's measurement of illness beliefs about depression. This would be a sure, albeit labor intensive, approach to the problem.

Because the retest findings from the present study were moot, the important substantive and psychometric issues of the stability of BADIT beliefs and the dependability of BADIT measurement await appraisal via future research efforts. In fact, once the fundamental stability issue is satisfactorily settled, it can serve as a platform for exploring important questions of a related nature. For instance, how stable are illness beliefs about depression across affective states? In particular, in considering the individual depressed person, are their beliefs about depression apt to be markedly different during an episode of de-
pression than before or after that episode? And, if illness beliefs about depression are not found to be especially state-dependent, can controlled experimentation help to show what other kinds of influences they may be reactive to, such as the treatment itself, the beliefs of the treatment provider, etc.?

**Recommendations for Further Study**

Several indispensable scale development tasks lay beyond the scope of this dissertation, most of them having to do with construct validity. In addition to some already cited needs for further study--such as the critical need to investigate the generalizability of BADIT findings through research with other samples--it was felt that construct validity studies must occupy a prominent place in the BADIT's immediate future. What follows, therefore, is a brief enumeration of some of those tasks related to articulating the construct validity of the BADIT that are recommended for further study. Construct validity is a rubric having many interpreters; Loevinger's rather encompassing approach to the subject (1957) was used here as a framework for grouping the recommended tasks.
Specificity

Demonstrating that BADIT measurement is specific to those constructs which it purportedly measures is a basic task to which future research will need to attend. A customary and efficient strategy for proceeding with such a demonstration would be to administer the BADIT\textsuperscript{10} in conjunction with several other instruments carefully selected to test the extent to which BADIT scale scores converge (positively correlate) with the measurement of related constructs and diverge from (do not correlate or negatively correlate with) the measurement of only nominally related constructs.

In this regard, a useful set of measures for evaluating convergence would be the generalized expectancies for control over health which constitute the three Multidimensional Health Locus of Control scales (Wallston, Wallston, & DeVellis, 1978). An analysis of divergence, on the other hand, might demand the employment of more than one instrument. It would be useful, for instance, to employ an instrument such as the Dysfunctional Attitude Scale (Weissman, 1980) which measures distorted beliefs associated with clinical depression in order to evaluate whether the measurement of those beliefs is discriminable from the BADIT's measure-

\textsuperscript{10} Optimally, these measures should be administered to a large, heterogeneous sample, randomly drawn from the general public.
ment of illness beliefs about depression. In addition, it would be useful to employ an instrument such as the Stress Reaction scale of the Multidimensional Personality Questionnaire (Tellegen, 1978/1982) which measures something akin to neuroticism, in order to determine whether BADIT measurement is sensitive to the measurement of a theoretically unrelated and confounding trait.

It should be noted that the BADIT and the three other measures mentioned all rely on self-report methodology. As Campbell and Fiske (1959) pointed out, this kind of dependence on a common methodology substantially weakens the construct validation strategy recommended above. It would best to strive to find measures which utilize different measurement methods in an attempt to segregate the biasing influence of method variance on the construct of interest. The fact that the BADIT measures beliefs, which are not directly observable phenomena, sorely limits the availability of alternative methods of measurement, however.

**Construct Representation**

In terms of the present study, a concern with the simple question, "Did BADIT items and scales measure what they were purported to measure?", must supersede all other concerns with construct validity. Experience gained with the BADIT caused the author to be aware of some distinct issues related to construct representation which need to be addressed in continuing work on the BADIT.
First, BADIT items were explicitly defined as propositions representing illness beliefs, a construct derived from the ethnographic literature. How faithfully, in fact, did items adhere to that definition, in every case? Were there occasions when the items were indistinguishable from attitudes or opinions—such as B5011, perhaps—and what significance would such deviations have had? In other words, is the notion of illness beliefs expressed clearly enough in the wording of items to warrant continued consideration of it as an integral aspect of practical BADIT measurement? To test this question, a panel of raters should be able to agree in most instances whether or not each BADIT item conformed to the prescribed definition of an illness belief.

Second, there appears to be some disparity between the designation of the BADIT treatment scales and the constructs their respective items actually represent. Close examination of the Biomedical/Treatment (BIO/TREAT) scale reveals that all five of its items deal with drug treatments for depression; consequently, the scale should more properly have been designated a "Pharmacotherapy" scale. A related problem, then, is that, to maintain balance, all the Psychosocial/Treatment (PSY/TREAT) scale items should have dealt with psychotherapy, which they did not. In the future, some basic scale development activity will have to be directed at this problem. Scale designations will have to

11 "It’s ridiculous to think that there is a gene which is responsible for depression".
be rethought, and either the BIO/TREAT scale will have to be altered to include items dealing with other biomedically-oriented treatments such as electroconvulsive therapy (ECT) and phototherapy, or the PSY/TREAT scale will have to be altered, restricting it to items dealing only with psychotherapy.

A third issue, one which will only be touched on because it has already been quite extensively covered, relates to problems in construct representation stemming from essential differences in the cognitive-linguistic coding of the biomedical and psychosocial domains. The BADIT's biomedically-oriented items trade in terms which have unimpeachable biomedical connotations--terms such as "inherited disease", "brain substance", "biochemical imbalances", "medication"--whereas the psychosocially-oriented items, being drawn from a number of experience categories, tend to invite a confusion of connotations.

This sort of construct ambiguity is well illustrated by a Psychosocial/Etiology item about sin (B612). Although sin is, grossly, a more psychosocially related construct than a biomedically related one, does that justify locating it in a domain of psychosocially-oriented beliefs? Would it not be more accurate to locate it in a domain of moral, religious or spiritual beliefs about depression?

12 "People become depressed because they have sinned and behaved immorally".
Before launching into the labor involved in developing additional items, constructing new scales, or restructuring existing scales, the aforementioned problems with the substantive aspect of the BADIT's construct validity should first be checked by objective assessment. Several methods are available for proceeding along these lines.

First, the rating task employed with the expert panel in the present study could be reversed: experts could be presented with item sets and then be asked to designate the most fitting scale names and structure for them. A second, more expanded task would involve Q-sort methodology in which subjects could be given all the BADIT items in random order and could be asked either to a) sort them into piles with designated categories corresponding to BADIT scales or b) sort them intuitively into piles which would then be designated by the sorters.

In addition to rectifying discrepancies and inadequacies with the existing state of construct representation in the BADIT, energies must also be devoted to enhancing the substantive component of the BADIT's construct validity. A relatively simple but effective way to accomplish this enhancement would be through pursuing correlational studies carefully designed to extend the nomological network (Cronbach & Meehl, 1955, p. 290) of constructs that contribute to the articulation of a general theory of belief-mediated response to illness.
Regarding the BADIT's focus on depression, several constructs come to mind that might prove especially fruitful for future investigation; these are: responsibility-taking, learned resourcefulness (Rosenbaum, 1980—in particular, refer to its role in a comparative treatment for depression study in Simons, Lustman, Wetzel, & Murphy, 1985), and hardiness (Kobasa, 1979). Study of these might help to validate the construct-base of the BADIT by possibly explicating further the role of illness beliefs in the chain of mediating variables that affect the exploitation of antidepressive personal resources.

The External Component of Construct Validity

Predictive (Clinical) Validity

Probably the strongest approach to validating the BADIT would be to test its ability to perform in a predicted manner, in the applied clinical situation for which it was devised. While such a test would have the validating power associated with the typically unequivocal nature of criterion-related results, it is also the kind of test which requires such sizable resources that it makes the likelihood of being carried out next to nil. With this understanding, the following skeletal proposal for a test of the predictive validity of the BADIT is offered not as a practical recommendation, but as a pertinent heuristic.
The proposed research should be a prospective treatment response study in which a narrowly defined group of depressed subjects are randomly assigned to either a pharmacotherapy treatment condition or a psychotherapy treatment condition\textsuperscript{13}. The BADIT would be administered to all subjects prior to treatment\textsuperscript{14}. Dependent variables would be treatment outcome, and satisfaction with treatment. Subjects' perceptions of treatment received would be used as a manipulation check to assess the "take" of the independent variable (treatment condition). Predictions would be derived from hypotheses based on the belief-mediated response to depression model—viz., individuals receiving treatments congruent with their beliefs generate greater treatment responses than comparably depressed individuals receiving treatments conflicting with their beliefs because congruence of this kind promotes the exploitation of antidepressive personal resources.

If the results from this research were to show that the BADIT had predictive clinical validity, then those data could lay the groundwork for using BADIT scale scores as key variables in a treatment response classification scheme. In addition, this kind of study would present an exceptional

\textsuperscript{13} The psychotherapy condition would need to be specifically named, e.g., cognitive therapy, interpersonal psychotherapy, psychodynamic psychotherapy, etc., and perhaps, even explicitly stipulated by treatment manual.

\textsuperscript{14} This would be a valuable incidental opportunity to administer the BADIT to all treatment providers, as well.
opportunity to explore a closely related hypothesis by collecting data on subjects' attributions of change (or lack thereof) via administration of a simple post-treatment questionnaire.

**Concurrent Validity**

Another criterion-related approach to validating the BADIT would be to show that it had concurrent validity. Like predictive validity, this too is a very convincing path toward construct validation, and it is fortunately a much more accessible one. A fairly simple research design for appraising concurrent validity would involve checking the concordance of the self-declared ideological commitments of mental health professionals with their BADIT belief orientation scores. This task might be made easier by selectively surveying those divisions within both APAs\(^\text{15}\) which most closely correspond to the BADIT's two ideological belief orientations, biomedical and psychosocial. Respondents could be asked in an outright manner about the orientation of their beliefs using a number of different formats, including open-ended, forced choice (e.g., multiple choice), or rank ordering the personal importance of a given set of propositions.

A more rigorous though more challenging approach, one which would take the already suggested research strategy a

\(^{15}\) The American Psychological Association, and the American Psychiatric Association.
step further, would be to attempt to relate self-reported beliefs and claimed ideological investments to actual clinical practice. It would be best if the measurement of practice behavior was achieved through direct but unobtrusive observation. Given the usual impediments to making such observations, however, it would also be possible to observe simulated clinical behavior through responses to questions concerning presumed etiology and recommended treatment for case vignettes of depression.

**Potential Utility**

This section briefly covers some of the potential utility of the BADIT as a measuring instrument which can be profitably applied to a variety of clinical and research problems. As a concluding section, two effects are intended. First, this section's emphasis on the BADIT's potential usefulness underscores the practical interests which lie at the heart of this dissertation. Second, this section offers a final look at the BADIT from a previously unexposed angle that conveys the implications of having a standardized means for measuring illness beliefs about depression.

**Clinical Tool Applications**

As has been detailed in many places throughout this dissertation, the BADIT was developed with the major purpose of assisting treatment planning with depressed individuals. More narrowly, the BADIT was specifically designed to pro-
vide the kind of information which would guide treatment planners in pairing depressed patients/clients with the modality of treatment for depression from which they would be likely to benefit most. In this respect, the BADIT has the potential to provide clinicians with individualized, treatment-focused assessment of their depressed patients/clients.

The rationale for using the BADIT in the above described manner derives directly from the author’s model of belief-mediated response, namely, individuals receiving the mode of treatment which is most congruent with their beliefs about depression will produce the largest, conative-styled treatment response. The model delineates another paradigm for the exploitation of antidepressive personal resources, however, and that is the mesmeric paradigm.

A mesmeric-styled treatment response is fostered by the mainly nonverbal awareness of interpersonal congruence which typically obtains when patients/clients and their treatment providers share assumptions contained in their illness beliefs16. The BADIT can also be used to facilitate treatment planning in order to try and arrange for this latter, mesmeric type of treatment response. In this case, the BADIT would be administered to prospective treatment providers, in addition to being administered to the prospec-

16 Kleinman would describe them as having complementary or overlapping explanatory models of the illness (1980).
tive patient/client, in order to achieve a compatible match-up.

Research Tool Applications

There is a confluence of clinical and research interest in the impact of social system forces on the conduct and outcome of treatment relationships and the BADIT could serve these interests well. From the perspective of a more clinically dominated application, this is the macro-scaled or ecological analog of the second treatment planning issue, discussed above. It takes up the question of congruence, or treatment alliance, effects as those effects are distributed throughout a treatment setting. To suit this purpose, the BADIT could be administered to all levels of staff in a treatment ecology, from direct treatment providers to program administrators to maintenance and clerical workers, and their obtained scale scores could be collated to help characterize the illness belief orientation of the immediate treatment setting or the whole institution.

From the perspective of a more research dominated application, the identical use of the BADIT would make it an invaluable tool for specifying in quantitative terms what a given treatment environment is like with respect to belief orientation toward depression. By making the treatment environment accessible to direct measurement in this way, the BADIT would enable either controlled observation of single treatment settings in smaller depression treatment studies
or comparison of the environments of different treatment settings in multisite collaborative research.

Again, if used in a similar fashion, the BADIT could also play an instrumental role in the kind of basic clinical research application to which Rippere alluded when she observed that "a comparative study of the psychiatric dramatis personae within a single institution might reveal some important areas of subcultural difference, as well as possibly drawing attention to unsuspected tracts of common ground. People occupying similar roles in different institutions might also be compared, within or across cultures" (1977d, pp. 472-473).

Rippere’s preceding comment introduces the potential use of the BADIT as an ethnographic tool. The BADIT would lend itself nicely to the traditional project of cross-cultural survey research. The BADIT could be used to help determine whether there is sufficient correspondence between the illness beliefs of individuals in quite disparate societies to enable a cognitive mapping of one culture’s belief structure onto another’s. For instance, are the ideological belief orientations of contemporary North American culture replicated, even approximately, in any of the belief systems of Third World cultures?

The BADIT could be used to help clarify some of the cross-cultural issues which were raised by Rippere’s own comprehensive study of the social and clinical significance of beliefs about depression in England. Using that case as
an example, the BADIT could be employed to facilitate a comparative analysis of explanatory models of depression in the cognate cultures of a larger linguistically-related community, the English-speaking countries. A promising variation of the same application but for highly diversified, mass, polyglot cultures, like those of America, China, the Soviet Union, or India, would be to employ the BADIT in a comparative ethnomedical analysis from a subcultural perspective.

In some, if not many, cases, local linguistic and cultural limitations would make the wholesale importation and translation of the BADIT a senseless enterprise. In such cases, the BADIT could serve as a prototype for developing instruments to survey explanatory models of depression which would be compatible with indigenous cultures.

Finally, in a most fundamental of research capacities, the theoretical rationale and methodology involved in developing the BADIT could serve as a model for proceeding with the investigation of beliefs about other illnesses and the impact those beliefs have.
APPENDIX A

BACKGROUND QUESTIONNAIRE FOR EXPERTS
RATER BACKGROUND QUESTIONNAIRE

The background information you provide me with here will enable me to describe the composition of the panel of raters to research consumers (and to my dissertation committee!). Please use your judgment in making your responses as brief as possible.

1. Present position(s) and years in each:

2. About how much of your professional time is engaged in each of the following activities?:

   Diagnosis ___%  Treatment ___%
   Research   ___%  Teaching ___%
   Administration ___% Other_________________ ___%

3. Please characterize, in broad terms, your current treatment orientation:

4. Major training and, where relevant, certification:

5. Year major training completed:

6. Please characterize, in broad terms, the predominant treatment orientation(s) of the institutions where you received your major training:

7. How comfortable are you with being considered an "expert" in the general area of depression?

   [ ] not very  [ ] somewhat  [ ] feels fine

If you would like a copy of my dissertation abstract, check here [ ]

Rater Name ___________________________  Rater # _____
Date Out ___________  Date Back ___________
APPENDIX B

RATING BOOKLET FOR EXPERT PANEL
August 1986

Dear :  

Thank you for your willingness to participate as a member of the small panel of experts I have selected to evaluate several aspects of a measurement I'm developing. The measure is a Survey of Adult Beliefs About Depression and Its Treatment (BADIT). The development of the BADIT comprises the core of my PhD-dissertation project in Clinical Psychology for the Department of Psychology at the University of Rhode Island (Kingston, Rhode Island).

In the several pages that follow, you will be asked to:

1) rate all of the BADIT's 72 items with regard to two dimensions of their item content;

2) rate a subset of 22 BADIT items regarding a third dimension of content;

3) provide some basic information about your professional background.

Specific instructions appear at the beginning of each of the tasks. They may be completed in any order you wish. It would be preferable, however, if the ratings were completed at one sitting; they should take about 45 minutes, total, to complete. Kindly refrain from discussing any of the items with anyone until you've finished rating them. I will make individual arrangements with you for collecting your completed forms.

Thank you again for your generous assistance,

Eliezer
To the right of each item there are four columns. The columns relate to two different aspects of item content.

Your task in evaluating the items is twofold: 1) to determine whether each item deals with the Etiology of depression or with the Treatment of depression, and 2) whether the particular matters referred to in each item are either Biomedical or Psychosocial in nature. Please note that the second rating is not to determine whether agreement with an item constitutes a Biomedical or a Psychosocial viewpoint. For instance, an item stating a belief unfavorable towards ECT should be rated as a Treatment item, Biomedical in nature. Although the view expressed was psychosocial, the item is about ECT, a biomedical treatment method.

Read each item carefully, considering it independently of the others. Then, to indicate your rating of the item's overall subject matter and its particular substantive focus, clearly mark (√ or ×) the appropriate columns.

Please remember to use the space provided at the end to date your ratings.

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7. It's foolish for people to feel responsible for their depressed lives because they can't do anything about their brain chemistry.

8. The root of adult depressions are painful childhood memories.

9. Depression is essentially a medical problem and should be regarded in the same way that one regards a broken arm or the measles.

10. It's better for depressed patients to be given many choices about their treatment than to have a doctor make decisions for them.

11. Depression runs in families because it is an inherited disease.

12. Depression can be effectively treated with prayer and religious faith.

13. Although poorly understood, biological factors like allergies, biorhythms, and seasonal changes play a significant role in causing depression.

14. Clinics and hospitals are not usually good places to go for help with depression since medical experts tend to take away patients' responsibility for their own treatment.

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44. A major task for depressed people is to accept their depression as something which is part of them and not just something which invaded their bodies.

45. The symptoms of depression are caused by a disease which affects the brain.

46. Being suddenly frightened or angered can often help jolt a person out of depression.

47. While depressed people can do things to make themselves feel better, it's their physician's responsibility to restore them to their normal functioning.

48. No matter how well scientists understand human neurobiology, they will never be able to explain why people get depressed unless they take psychological factors into account.
49. When people remain depressed despite treatment, it is generally more their physician's fault than it is their own.

50. It's ridiculous to think that there is a gene which is responsible for depression.

51. Desire to participate in treatment is admirable, but has no real bearing on whether depressive symptoms improve.

52. A problem that depressed people need to undertake as their own is to look inward to understand their depression.

53. A pessimistic outlook may not always be helpful, but it can't itself be the cause of depression.

54. Even if people have "biological" depressions, they should still be held responsible for their treatment and accountable for their behavior.

55. A depressed person can't do much more than hope they have a competent doctor.

56. Living or working in an unpleasant, unrewarding environment can often be the sole cause of depression.

57. Even if their life situations don't improve, as long as depressed people are put on the right medication, their depressions will clear up.

58. It's important for depressed people to know what their psychiatric diagnosis is and how it was arrived at.

59. Once a downward slide into depression begins, a biological process is set into motion that cannot be immediately or easily reversed.

60. Unless a depressed person is suicidal, a hospital stay will be of no use in combatting their depression.
61. Whether or not someone believes that he or she
will get better has no bearing on their recovery
from depression.

62. Depressed people are not really "themselves"
and should not be held responsible for what they
feel or say when they're depressed.

63. In the long run, wanting not to be depressed
is probably the critical factor in recovery from
depression.

64. Knowing that someone truly cares and stands by
them, is often the one thing which enables people
to finally pull out of a long and crippling
depression.

65. Depression can be cured by changing the
depressed person's environment to make it more
pleasurable and rewarding.

66. The treatment of depression primarily involves
readjusting the levels of certain brain substances
and regulatory mechanisms in the body.

67. By talking over painful events and childhood
experiences, one can discover the source of one's
depression and then, be rid of it.

68. Talking about one's problems may provide
temporary relief, but can never cure a severe
depression.

69. Like diabetes, depression is a disease which
can generally be controlled by taking medication.

70. In order to get better, depressed people must
use their inner strengths to struggle with and
fight off their depressions.
71. To treat depression effectively, it's ultimately more important for a psychiatrist to know the right medication to prescribe than to know how to establish a good relationship with his or her depressed patient.

72. The problem with prescribing medication for depression is that it often interferes with patients' motivation to struggle with, understand, and fight off their depressions.

*** Please indicate the date these ratings were completed: _________.

Thank you.
To the right of each item there are two columns. Your task will be to determine whether each item expresses the attitude a) that a depressed individual should take primary responsibility for his or her depressed condition (Self), or b) that factors or persons outside the depressed individual ought to assume responsibility for the depressed condition (Other).

Read each item carefully, considering it independently of the others. Then, to indicate your rating of the attitude expressed by the item, clearly mark [✓ or ×] the appropriate column.

Please remember to use the space provided at the end to date your ratings.

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APPENDIX C

MEASURES: PHASE 1 & 2
BDI

CIRCLE the correct answer to each question which best describes how you've been feeling recently. If more than one answer applies, use the higher number.

1. 0 I do not feel sad.
   1 I feel sad.
   2 I am sad all the time and I can't snap out of it.
   3 I am so sad or unhappy that I can't stand it.

2. 0 I am not particularly discouraged about the future.
   1 I feel discouraged about the future.
   2 I feel I have nothing to look forward to.
   3 I feel that the future is hopeless and that things cannot improve.

3. 0 I do not feel like a failure.
   1 I feel I have failed more than the average person.
   2 As I look back on my life, all I can see is a lot of failures.
   3 I feel I am a complete failure as a person.

4. 0 I get as much satisfaction out of things as I used to.
   1 I don't enjoy things the way I used to.
   2 I don't get real satisfaction out of anything anymore.
   3 I am dissatisfied or bored with everything.

5. 0 I don't feel particularly guilty.
   1 I feel guilty a good part of the time.
   2 I feel quite guilty most of the time.
   3 I feel guilty all of the time.

6. 0 I don't feel I am being punished.
   1 I feel I may be punished.
   2 I expect to be punished.
   3 I feel I am being punished.

7. 0 I don't feel disappointed in myself.
   1 I am disappointed in myself.
   2 I am disgusted with myself.
   3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.
   1 I am critical of myself for my weaknesses or mistakes.
   2 I blame myself all the time for my faults.
   3 I blame myself for everything bad that happens.

9. 0 I don't have any thoughts of killing myself.
   1 I have thoughts of killing myself, but I would not carry them out.
   2 I would like to kill myself.
   3 I would kill myself if I had the chance.

10. 0 I don't cry any more than usual.
    1 I cry more now than I used to.
    2 I cry all the time now.
    3 I used to be able to cry, but now I can't even though I want to.

*Copyright 1974 Aaron T. Beck, M.D.
11. 0 I am no more irritated now than I ever am.
   1 I get annoyed or irritated more easily than I used to.
   2 I am quite annoyed or irritated a good deal of the time.
   3 I feel irritated all the time now.

12. 0 I have not lost interest in other people.
   1 I am less interested in other people than I used to be.
   2 I have lost most of my interest in other people.
   3 I have lost all of my interest in other people.

13. 0 I make decisions about as well as I ever could.
   1 I put off making decisions more than I used to.
   2 I have greater difficulty in making decisions than before.
   3 I can't make decisions at all anymore.

14. 0 I don't feel I look any worse than I used to.
   1 I am worried that I am looking old or unattractive.
   2 I feel that there are permanent changes in my appearance that
      make me look unattractive.
   3 I believe that I look ugly.

15. 0 I can work about as well as before.
   1 It takes an extra effort to get started at doing something.
   2 I have to push myself very hard to do anything.
   3 I can't do any work at all.

16. 0 I can sleep as well as usual.
   1 I don't sleep as well as I used to.
   2 I wake up 1-2 hours earlier than usual and find it hard to get
      back to sleep.
   3 I wake up several hours earlier than I used to and cannot get
      back to sleep.

17. 0 I don't get any more tired than usual.
   1 I get tired more easily than I used to.
   2 I get tired from doing almost anything.
   3 I am too tired to do anything.

18. 0 My appetite is no worse than usual.
   1 My appetite is not as good as it used to be.
   2 My appetite is much worse now.
   3 I have no appetite at all anymore.

19. 0 I haven't lost much weight, if any, lately.
   1 I have lost more than 5 pounds.
   2 I have lost more than 10 pounds.
   3 I have lost more than 15 pounds.

*(Are you purposely trying to lose weight by eating less? _____Yes
   _____No)
20. 0 I am no more worried about my health than usual.  
     1 I am worried about physical problems such as aches and pains, or 
        upset stomach, or constipation.  
     2 I am very worried about physical problems and it's hard to think 
        of much else.  
     3 I am so worried about my physical problems, I cannot think about 
        anything else.

21. 0 I have not noticed any recent change in my interest in sex.  
     1 I am less interested in sex than I used to be.  
     2 I am much less interested in sex now.  
     3 I have lost interest in sex completely.
Please do not write your name anywhere on this booklet!

This questionnaire has been designed to survey what you personally believe about depression and its treatment. There are no right or wrong answers. Just try to respond to each item so that your answers will faithfully reflect what you actually believe and not what you think a person should believe. In every instance, the term "depression" refers to a condition, lasting more than a week, in which there is a major alteration of mood and a serious impairment in usual functioning.

Each item states a belief with which you may agree or disagree. Next to the items is a rating scale which ranges from "Completely Disagree" to "Completely Agree". Please consider each statement independently from the others, then place a checkmark (✓) in the column that best represents the extent to which you disagree or agree with it. Please make sure to respond to every item, leaving none blank and making only one mark per item.

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32. People who assume full responsibility for their depressed life condition probably recover more quickly than those who don’t.

33. Singing, art activities, and hobbies are pleasant ways for depressed people to spend time but are of no real value in combatting disabling depressive symptoms.

34. If a person were depressed and unemployed, then finding him or her a good job would probably be the best "medicine".
35. While struggling with depression, people should be relieved of any sense of responsibility for their depressed situation.

36. Depression is a greater problem today than ever before because modern life is so stressful.

37. Feelings of depression are the product of biochemical imbalances in the brain.

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44. A major task for depressed people is to accept their depression as something which is part of them and not just something which invaded their bodies.
The symptoms of depression are caused by something like a blood disease which affects the brain. Even if people have "biological" depression, they should not blame their illness on their body or their genes. In many cases, depression is caused by psychological factors. It is not their fault. They need help. Being suddenly frightened or angered can often help jolt a person out of depression. While depressed people can do things to make themselves feel better, it's their physician's responsibility to restore them to their normal functioning. No matter how well scientists understand human neurobiology, they will never be able to explain why people get depressed unless they take psychological factors into account. When people remain depressed despite treatment, it is generally more their physician's fault than it is their own. It's ridiculous to think that there is a gene which is responsible for depression. Desire to participate in treatment is admirable, but it has no real bearing on whether depressive symptoms improve. A problem that depressed people need to understand their own. A pessimistic outlook may not always be helpful, but it can't be the cause of depression. Even if people have "biological" depressions, they should still be held responsible for their behavior, and accountable for their treatment. The table below shows how people feel about these statements. Complete the table by selecting the appropriate response for each statement.

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<td>A problem that depressed people need to understand their own.</td>
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<td>Statement</td>
<td>Completely Agree</td>
<td>Mostly Agree</td>
<td>Agree More Than Agree</td>
<td>Neutral</td>
<td>Disagree More Than Agree</td>
<td>Mostly Disagree</td>
<td>Completely Disagree</td>
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<td>55. A depressed person can't do much more than hope they have a competent doctor.</td>
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<td>56. Living or working in an unpleasant, unrewarding environment can often be the sole cause of depression.</td>
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<td>57. Even if their life situations don't improve, as long as depressed people are put on the right medication, their depressions will clear up.</td>
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<td>58. It's important for depressed people to know what their psychiatric diagnosis is and how it was arrived at.</td>
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<td>59. Once a downward slide into depression begins, a biological process is set into motion that cannot be immediately or easily reversed.</td>
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<td>60. Unless a depressed person is suicidal, a hospital stay will be of no use in combating their depression.</td>
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<td>61. Whether or not someone believes that he or she will get better has no bearing on their recovery from depression.</td>
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<td>62. Depressed people are not really &quot;themselves&quot; and should not be held responsible for what they feel or say when they're depressed.</td>
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<td>63. In the long run, wanting not to be depressed is probably the critical factor in recovery from depression.</td>
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<td>64. Knowing that someone truly cares and stands by them, is often the one thing which enables people to finally pull out of a long and crippling depression.</td>
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65. Depression can be cured by changing the depressed person's environment to make it more pleasurable and rewarding.

66. The treatment of depression primarily involves readjusting the levels of certain brain substances and regulatory mechanisms in the body.

67. By talking over painful events and childhood experiences, one can discover the source of one's depression and then, be rid of it.

68. Talking about one's problems may provide temporary relief, but can never cure a severe depression.

69. Like diabetes, depression is a disease which can generally be controlled by taking medication.

70. In order to get better, depressed people must use their inner strengths to struggle with and fight off their depressions.

71. To treat depression effectively, it's ultimately more important for a psychiatrist to know the right medication to prescribe than to know how to establish a good relationship with his or her depressed patient.

72. The problem with prescribing medication for depression is that it often interferes with patients' motivation to struggle with, understand, and fight off their depressions.

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<th>How old are you?</th>
<th>Are you male or female? (please circle)</th>
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<td>Are you a psychology major? yes [ ] no [ ] intend to be [ ]</td>
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</table>

Have you or has anyone close to you received professional help for problems with depression? yes [ ] no [ ]
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