

# **Integral Psychotherapists' Treatment-Matching Decisions: An Exploratory Study**

## **SUMMARY/ABSTRACT**

Perhaps the most critical decision psychotherapists need to make in their everyday practice is which of the many available interventions and change processes they should use with a given patient; yet theoretically sound and empirically demonstrated guidelines to guide these decisions are often unavailable, which in turn reduces the effectiveness of the treatment and the future well-being of the patient. The proposed project aims at addressing this problem by using new conceptual and practical tools offered by *Integral Psychotherapy* – a recent application of Wilber's Integral Theory to the field of psychotherapy. While integral psychotherapy has the potential to offer a comprehensive and theoretically-based approach to therapists' treatment-matching decisions, no empirical research is available to date on how expert "integral" therapists actually use integral theory principles and tools to make these decisions, nor on the outcomes and, therefore, the effectiveness of these decisions. To fill this gap, we propose an exploratory "intensive single-subject design" research study of five integral therapists each providing treatment to a patient for approximately 50 sessions, with the goal of elucidating their clinical decision-making process as well as the outcomes of their treatment-matching decisions. To this end, a rich set of data will be collected about each treatment – including patients' responses to a specific tool designed to gather comprehensive information about a patient at the beginning of a treatment (*Integral Intake*), videotapes of each therapy session, audio-taped group supervision sessions and semi-structured interviews with the therapists, and patients' responses to a battery of commonly used outcome measures as well as researcher-designed questionnaires. These data will be analyzed using a combination of quantitative and qualitative methods, including Bogdan & Biklen's "modified analytic induction" method and Greenberg's "intensive analysis of concrete-change performances" protocols. In addition to contributing new knowledge on how integral psychotherapy principles can translate into more effective treatment-matching decisions, the proposed project will also lead to: (a) assessing the clinical utility of the *Integral Intake*; (b) improving the current *Integral Intake* instrument and its accompanying documentation; (c) refining a preliminary taxonomy that matches nearly 200 available interventions to specific sets of patients' variables considered critical by integral theory; and (d) collect the data needed to later develop a *Treatment Manual of Integral Psychotherapy*.

## **PROJECT NARRATIVE**

The proposed project will provide therapists with sounder principles and guidelines to guide their decision of which treatment could be most appropriate for a given patient, based on the patient's diagnosis, individual characteristics (i.e., developmental levels, personality types, etc.) and personal circumstances. This, in turn, has the potential to lead to more effective treatments that can reduce symptoms and improve daily functioning for millions of people suffering from a variety of mental health disorders every year, and thus advance the NIMH mission to reduce the burden of mental illness and behavioral disorders.

## **RESEARCH PLAN**

**1. Introduction** (Not applicable as this is a first submission)

### **2. Specific Aims**

The toll that mental illness exacts on both the quality of peoples' lives and the functioning of American society is immense – for example, depression alone has estimated annual costs of 44 billion dollars (when considering direct costs, mortality, absenteeism and decreased work productivity) (Shoor, 1994). Thus, significant improvements in the delivery of mental health services would not only decrease the suffering of millions of individuals and families, it would also save our country billions of dollars yearly. A crucial step in improving the effectiveness of psychotherapy, as identified by experts in the field and the NIH (Glass et al., 1998; Prochaska & Norcross, 2003), is providing therapists with theoretically sound and empirically supported guidelines to choose the best psychotherapy approach to use with specific patients. This is especially important as most psychotherapists today identify themselves as eclectic or integrative and can choose among over 400

recognized psychotherapy approaches (Prochaska & Norcross, 2003). *Integral psychotherapy*, an emerging meta-theory derived from the application of integral theory (Wilber, 2000a) to the field of psychotherapy (Black & Westwood, 2004; Foster, 2003; Ingersoll, 2002; Ingersoll & Cook-Greuter, 2007; Marquis, 2007; Marquis, 2008; Marquis & Warren, 2004; Marquis & Wilber, in press; Pearson, 2007), offers a robust theoretical framework from which to derive systematic guidelines for treatment-matching decisions. However, lack of empirical studies to date has limited how practitioners can benefit from this new approach.

The long-term goal of the proposed research is to *improve the effectiveness of psychotherapy by increasing knowledge and improving practices about how to most effectively match specific interventions and change processes to each patient, as a function of both the patient's diagnosis and personal characteristics* (i.e., developmental levels, personality types, etc.) *using integral psychotherapy as a framework*. Given the “youngness” of integral psychotherapy and the lack of empirical studies using this approach, an exploratory study is most appropriate – one that will (a) elucidate the clinical decision-making process of a few “expert” integral psychotherapists, with particular attention to how they use a specific tool designed to gather information about the patient at the beginning of a treatment (*Integral Intake* – Marquis, 2008) and (b) assess the effectiveness of the decisions made (outcome). More specifically, the proposed study will consist of an “intensive single-subject design” research study (Heppner et al., 1992) involving five integral psychotherapists each providing treatment to a patient for approximately 50 sessions. A rich set of data about these five treatments will be gathered and analyzed using methodologies informed by integral psychotherapy principles to address the following research questions:

1. *How do expert integral therapists use the information that patients provide via the Integral Intake to begin formulating case conceptualizations and to create integrative treatment plans?*
2. *How do expert integral psychotherapists continue to make their clinical decisions regarding which change processes and interventions to use, and when, with their patient throughout the treatment?*
3. *What is the effect of these treatment decisions, i.e., how effective are the chosen change processes and interventions with each patient?*

With the goal of improving clinical practice by concretely aiding psychotherapists in their treatment-matching decisions, findings for each of these questions will further be used to:

- Assess the clinical utility of the *Integral Intake* instrument to gain valuable information about the patient at the beginning of a treatment and inform the choice of treatment plan.
- Improve the current *Integral Intake* instrument and its accompanying documentation to better help therapists develop integrated, unified treatment plans.
- Refine the matching of available treatments according to patients' quadratic and ego-developmental dimensions which are at the core of integral psychotherapy (for more details, see *Background and Significance* section) (Marquis, 2008; Marquis, under review), while also providing some empirical illustrations.
- Collect the data needed to create a formalized, data-driven set of clinical guidelines regarding when and how to choose and implement change processes and specific interventions (i.e., a *Treatment Manual of Integral Psychotherapy*); although the creation of such a manual is beyond the scope of this project, the data from this study will inform its future development.

In sum, the proposed study challenges the common perception that the proliferation of alternative therapy approaches represents a “problem” for the field of psychotherapy, as well as the futile search for empirical proof that some of these approaches are better in absolute, seeking instead a solution in the creation of theoretically sound and empirically tested guidelines to enable therapists to appreciate how different approaches may in fact complement each other and be best suited for specific types of patients and circumstances. An emerging theory which has not yet been empirically tested – integral psychotherapy – is used as a theoretical framework to guide both the development of concrete guidelines for treatment-matching decisions and to inform methods for data collection and analysis.

### **3. Background and Significance**

#### *Articulation of the Problem the Proposed Study is Trying to Address*

In the past 60 years, the number of psychotherapies proliferated such that an excess of 400 distinguishable approaches (Prochaska & Norcross, 2003) emerged in an effort to improve patients' mental health and

behavioral functioning. However, we have very little definitive research that demonstrates consistent superiority of one single-school approach or intervention over the others; examples to the contrary -- such as the superiority of exposure and response prevention in the case of specific phobias -- are far more the exception than the norm (Lambert, 2003). Not surprisingly given this situation, for the last two decades the majority of therapists in the U.S. have reported practicing eclectically or integratively (Jensen, Bergin, & Greaves, 1990), as they perceive the limits and drawbacks of practicing solely within the parochial confines of any of those single psychotherapy approaches to outweigh the benefits that such “pure form” therapies attempted to offer. Given that therapists are confronted with this plethora of psychotherapy interventions – and a growing chasm separating research and practice (Miller, 2004) – how can therapists resolve the confusion and uncertainty that so many feel as they confront these fragmented heaps of technique? In other words, *upon what basis should therapists decide which change processes or interventions to use with a given patient?*

#### *Current Approaches to the Problem and Gaps in Psychotherapeutic Knowledge*

In response to numerous critiques of eclecticism (Mahoney, 1991; Lampropoulos, 2001; Marquis & Wilber, in press; Safran & Messer, 1997; Wachtel, 1991), the field of *psychotherapy integration* emerged. Although several integrative approaches hold considerable promise and have bolstered some empirical support, significant knowledge gaps remain. A notable example of an eclectic therapy founded upon patient-treatment matching is Beutler and Clarkin’s (1990) *Systematic Treatment Selection* (STS) approach (also referred to as *differential therapeutics*), which emphasizes four classes of variables with which to match treatments: treatment context (inpatient vs. outpatient), patient predisposing variables (personality style, severity of problem/distress, etc.), relationship variables (how well the patient and therapist are matched and skills used to enhance the quality of therapeutic alliance, etc.), and methods/techniques matched to the particular patient. Beutler et al. (1991) did find some differential effectiveness with depressed patients who differed with regard to an internal vs. external style of coping and low vs. high defensiveness/resistance; for example, patients with an externalizing coping style improved to a greater extent with a more directive cognitive therapy whereas supportive, self-directed therapy was more helpful for patients with an internalized coping style. Of great significance to the field of psychotherapy, and in line with an integral psychotherapy approach, are STS’s efforts to match specific treatments to a host of specific patient variables – such as motivation and compliance levels, complexity of problem(s), interpersonal reactance, and coping style. At the same time, STS neglects a host of other patient variables that integral psychotherapy has identified as important and worth considering, as discussed in the next section.

*Trans-theoretical Therapy* (TTT) (Prochaska & DiClemente, 1982; Prochaska & DiClemente, 2003; Prochaska & Norcross, 2003) – the metatheoretical approach that is most similar in nature to integral psychotherapy – has attempted to explain how therapists can choose the most appropriate approach for a given patient by matching specific processes of change (i.e., consciousness raising, self-reevaluation, counterconditioning) to each patient’s stage of readiness for change (i.e., precontemplation, contemplation, preparation, action). A valuable contribution of this approach is its attempt to match “mid-level” change processes (in between concrete techniques and abstract theoretical approaches) to individuals as a function of their readiness to – or stage of – change. However, much of its research base derives from smoking, alcohol and dieting studies, rather than the broad range of mental illness that is common in hospitals, community clinics, private practices, and so forth. Another limitation of TTT is that it doesn’t take into account additional important variables associated with different individuals other than their readiness for change.

#### *Potential Contributions of Integral Theory*

Integral psychotherapy is founded on integral theory (Wilber, 2000a), developed by philosopher Ken Wilber in response to the plethora of apparently contradictory assertions by diverse disciplinary and theoretical approaches and with the goal to strive for the most comprehensive understanding of any phenomenon. A primary purpose of integral theory is to foster the recognition that disparate aspects of reality – such as our biological constitution, cultural worldviews, felt-sense of selfhood, and social systems – are all critically important to any knowledge quest and, therefore, should be rigorously considered and researched. Integral theory is an integration of many diverse disciplines, including psychology and neuroscience, as well as moral philosophy and spiritual traditions. The result is a system of thought that coherently honors both ancient wisdom and modern knowledge from both the East and the West, and also incorporates both *individual* and *collective*, as well as *subjective* and *objective*, perspectives within an overarching developmental framework,

which can then be applied to essentially any field of knowledge – such as, for example, mental illness and psychotherapy. The model allows individuals (and therapists in particular) to use diverse theories, perspectives and approaches such that they augment and complement, rather than compete with and contradict, one another.

The *four quadrants* are a central component of the unifying model that Wilber (2000a) developed. The quadrants represent the combination of the *interior/subjective* and *exterior/objective* dimensions of a phenomenon, on one axis, with *individual* and *collective* perspectives from which the phenomenon could be looked at, on the other axis, as illustrated in Figure 1 below. Integral theory posits that comprehensive understanding of any phenomenon requires accounting for each of these four irreducible perspectives, because each quadrant provides a different, but valid, perspective for a given phenomenon – as illustrated later in the case of a depressed patient in Figure 2.

**Figure 1. The Four Quadrants of Integral Theory**

<p><b>Upper-Left (UL): Interior-Individual</b></p> <ul style="list-style-type: none"> <li>• Consciousness as internally experienced</li> <li>• The <i>experience</i> of consciousness</li> <li>• Non-measurable (invisible) realm of phenomenology</li> </ul>	<p><b>Upper-Right (UR): Exterior-Individual</b></p> <ul style="list-style-type: none"> <li>• <i>Behavior</i> as externally observed</li> <li>• Consciousness as <i>described</i> by neurotransmission and brain structures</li> <li>• Measurable realm of biology, information processing, and behavior</li> </ul>
<p><b>Lower-Left (LL): Interior-Collective</b></p> <ul style="list-style-type: none"> <li>• Non-measurable (invisible) realm of culture: norms, customs, meaning-making systems, relationships, worldviews, etc.</li> </ul>	<p><b>Lower-Right (LR): Exterior-Collective</b></p> <ul style="list-style-type: none"> <li>• Measurable realm of social systems and environment: economic, political, educational, medical systems, etc.</li> <li>•</li> </ul>

Another tenet of integral theory is that *levels* of psychological development along a number of key dimensions (i.e., cognitive, ego, moral, emotional, interpersonal) also affect how individuals experience the vicissitudes of life, including mental illness.

Although there are other important dimensions that integral theory takes into consideration (i.e., lines, states, types), quadratic and developmental level components reflect fundamental patterns and principles that appear to recur in multiple domains of knowledge and are thus considered the essential foci. Therefore, integral theory is also often referred to as AQAL (All Quadrants & All Levels).

In the *Preliminary Results* section we will articulate how a small group of integral theorists including the PI has applied these basic concepts and principles to begin to develop an *integral psychotherapy* approach, and how this innovative approach suggests new ways to address the “problem” of selecting interventions that are most appropriate for given patients and situations.

*Significance of the Study*

If the aims of the proposed project (as described in section 2) are achieved, scientific knowledge will be advanced by shedding light on how expert therapists make critical treatment decisions by taking into consideration a patient’s level of development as well as “quadratic” variables, in addition to providing some empirical data about the effectiveness of these decisions. This knowledge will lead to the development of concrete guidelines to choose the specific treatment that can best serve a given patient, looking at variables identified as important by integral psychotherapy (as illustrated in Figures 2, 3, and 4) – which, in turn, will improve clinical practice and lead to an increase in the mental health and well-being of millions of people.

This research study also has the potential to stimulate other researchers and funders who are currently unaware of the clinical effectiveness of integral psychotherapy to include it among those approaches being evaluated in clinical trial research. Given the necessity of evidence-based practice today – and the criteria for

participating in clinical trials, such as treatment manuals – this research project (which will pave the way to eventually create a Treatment Manual of Integral Psychotherapy) is an absolute must if the clinical value of integral psychotherapy will be recognized and thus have the potential to positively influence the delivery of psychotherapeutic services.

#### 4. Preliminary Studies

##### *PI's Contributions to the Initial Development of Integral Psychotherapy*

As integral psychotherapy is a relatively new treatment approach, the first contributions have necessarily taken place at the theoretical level, consisting in the refinement and application of Wilber's integral principles to the practice of psychotherapy. The PI has been extensively involved in this initial theoretical development (Marquis, Holden, & Warren, 2001; Mahoney & Marquis, 2002; Fall, Holden, & Marquis, 2004; Marquis & Warren, 2004; Marquis, 2007; Marquis, 2008; Marquis & Holden, 2008; Marquis & Wilber, in press), contributing publications for a variety of researchers and practitioners' audiences that explicate the key principles of integral psychotherapy, applying them in relation to: extant therapeutic approaches at both abstract (theoretical) and concrete (technical/intervention) levels; to the analysis of specific mental illnesses; as a guide to the assessment and treatment-matching process; and discussing potential advantages of this new approach for patients and therapists.

##### *Conceptual Applications of Integral Psychotherapy to Treatment Decisions*

With respect to the specific problem under study, integral theorists hypothesize that patients' quadratic and developmental dynamics are essential mediating variables influencing the matching of different treatments to different patients. This suggests that the notion that none of the forms of psychotherapy are superior to the others (what is sometimes referred to as the "Dodo Bird Verdict" [Rosenzweig, 1936, cited in Prochaska & Norcross, 2003]) may reflect less of a clinical reality than the fact that systematic research has not yet explored how patients' developmental and quadratic dynamics may be crucial mediating variables in demonstrating the differential effectiveness of different change processes in different circumstances.

For example, Marquis (2008) examined how Wilber's four quadrants can be used to become more aware of different yet all important components of depression, which in turn may suggest therapists use of complementary interventions, each most appropriate to address specific aspects of this mental illness – as summarized in Figure 2 below:

**Figure 2. Quadratic Aspects of Depression and Corresponding Treatment Approaches**

<p><b>Upper-Left (UL): Interior-Individual</b>  <i>Aspects:</i> hopelessness; self appraisals of worthlessness; negative views of self, world, and future  <i>Treatments:</i> cognitive restructuring; mindfulness</p>	<p><b>Upper-Right (UR): Exterior-Individual</b>  <i>Aspects:</i> sleep EEG abnormalities, dys-regulated neurotransmitter systems, and alterations of neuropeptides  <i>Treatments:</i> pharmacotherapy</p>
<p><b>Lower-Left (LL): Interior-Collective</b>  <i>Aspects:</i> factors that influence both the likelihood of developing a depressive episode (e.g., a consumer culture in which energies are directed toward acquiring material goods rather than cultivating interior development) as well as how depression is interpreted within one's culture (i.e., medical disease vs. inauthenticity vs. hexed)  <i>Treatments:</i> re-evaluation of patient's meaning-making system</p>	<p><b>Lower-Right (LR): Exterior-Collective</b>  <i>Aspects:</i> living in poverty, difficulty accessing social services and lacking appropriate mental health care  <i>Treatments:</i> resource advocacy; social liberation</p>

The PI has also begun to develop a taxonomy to classify nearly 200 of the currently available therapeutic interventions with respect to the four quadrants at the core of integral psychotherapy, as well as their relation to body, mind or spirit (Marquis, under review). Figure 3 below reports a small sub-set of this first effort at classification as an illustration.

**Figure 3. A Few Examples from an Integral Taxonomy of Therapeutic Interventions**

<p><b>Upper-Left (UL): Interior-Individual</b></p> <p><i>Body</i></p> <ul style="list-style-type: none"> <li>• Gendlin’s Focusing (1996) and attunement to immediate “felt-sense”</li> </ul> <p><i>Mind</i></p> <ul style="list-style-type: none"> <li>• Cognitive restructuring (Beck, 1976)</li> <li>• Awareness/consciousness raising (Beck, 1976)</li> </ul> <p><i>Spirit</i></p> <ul style="list-style-type: none"> <li>• Cultivating mindfulness (Linehan, 1993)</li> </ul>	<p><b>Upper-Right (UR): Exterior-Individual</b></p> <p><i>Body</i></p> <ul style="list-style-type: none"> <li>• Self-management programs; self-monitoring and recording (Meichenbaum, 1977)</li> <li>• Pharmacotherapy (Ingersoll &amp; Rak, 2006)</li> </ul> <p><i>Mind</i></p> <ul style="list-style-type: none"> <li>• Reality therapy’s WDEP system (Wubbolding, 2000)</li> </ul> <p><i>Spirit</i></p> <ul style="list-style-type: none"> <li>• EEG biofeedback and machines that help induce theta and delta states of consciousness (Schwartz &amp; Associates, 1995)</li> </ul>
<p><b>Lower-Left (LL): Interior-Collective</b></p> <p><i>Body</i></p> <ul style="list-style-type: none"> <li>• Attending to and mending ruptures in the therapeutic bond (Kohut, 1984)</li> </ul> <p><i>Mind</i></p> <ul style="list-style-type: none"> <li>• Role playing (Fall, et al., 2004)</li> </ul> <p><i>Spirit</i></p> <ul style="list-style-type: none"> <li>• “Selfless service:” compassion; social interest; social liberation (Adler, in Fall, et al., 2004)</li> </ul>	<p><b>Lower-Right (LR): Exterior-Collective</b></p> <p><i>Body</i></p> <ul style="list-style-type: none"> <li>• Basic session management skills and structure of sessions (all therapies)</li> </ul> <p><i>Mind</i></p> <ul style="list-style-type: none"> <li>• Social skills training (Prochaska &amp; Norcross, 2003)</li> </ul> <p><i>Spirit</i></p> <ul style="list-style-type: none"> <li>• Serving others: social justice and advocacy (Fall, et al., 2004)</li> </ul>

The ITTI provides a first conceptual tool to match treatment approaches with the focus and perspective identified by each quadrant, yet has not yet been empirically validated. In the proposed study, it will be utilized by the participating therapists as a tool to potentially inform their treatment-matching decisions, as well as used to inform some of the data analysis (as explained in the *Research Design* section).

Building on the key hypothesis of integral psychotherapy that people characterized by different stages of ego development face qualitatively different challenges, Marquis (2008) has also suggested how a number of different therapeutic change processes may optimally assist the resolution of a mental illness for patients at different levels of ego development – as summarized in Figure 4 below.

**Figure 4. The Spectrum of Ego Development, Psychopathology, and Treatment Processes**

<b>Ego Development</b>	<b>Class of Pathology</b>	<b>Treatment Process</b>
Presocial/Symbiotic	Psychoses	<b>Pharmacotherapy with psychotherapy as adjunct</b> (counterconditioning and stimulus control processes)
Impulsive	Borderline & narcissistic personality disorders	<b>Structure-building processes</b> (Dialectical Behavior Therapy; Transference-focused psychotherapy)
Self-protective	Neuroses	<b>Uncovering processes</b> (Psychodynamic and Gestalt approaches)
Conformist	Script pathologies	<b>Script analytical processes</b> (cognitive therapy, REBT, reality therapy)
Self-aware	Identity neuroses	<b>Introspective, Socratic dialogue processes</b>
Conscientious	Existential pathologies	<b>Existential-humanistic-experiential processes</b>

In sum, these initial conceptual studies suggest that an integral psychotherapy approach to treatment-matching decisions is similar in nature to both TTT and STS, in that it strives to match specific treatment approaches to specific patients and circumstances, yet it differs from those approaches with regard to what the most important specific variables are with which to match treatments. Integral psychotherapy points out the lack of attention to quadratic and developmental dynamics within a differential therapeutics paradigm as a major gap – yet these variables have not been empirically examined as of yet. Thus, research is needed to

confirm or reject the treatment-matching guidelines offered by integral psychotherapy. It is essential to emphasize that integral psychotherapy is not attempting to “reinvent the wheel” – it also pays attention to and incorporates existing empirically supported treatments and other evidence-based approaches, provided that the syndromes being studied do not violate the assumptions underlying empirically-supported treatment criteria and methodologies (Westen et al., 2004).

<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>

*Integral Intake*

The PI also created a specific tool (*Integral Intake* – Marquis, 2002; Marquis, 2008) to gather comprehensive information about each patient at the beginning of the treatment, in a way that takes into consideration many of the variables and dimensions identified as important by integral psychotherapy. A first empirical study on the utility of the *Integral Intake* was conducted by asking highly experienced psychotherapists to evaluate the *Integral Intake (II)* in comparison with the other two existing published idiographic intake instruments, the Adlerian-based Life-Style Introductory Interview (LI) and the Multimodal Life History Inventory (MI) (Marquis, 2002; Marquis & Holden, 2008). Specifically, it was hypothesized that psychotherapists would rank and rate the II highest on all three instrument dimensions (*overall helpfulness, comprehensiveness, and efficiency*) as well as four of the eight patient dimensions (*physical aspects of the patient’s environment, culture, spirituality, and what is most meaningful to the patient*); that they would rank and rate the MI highest on four of the eight patient dimensions (*thoughts, emotions, behaviors, and physical aspects of the patient*); and that they would rank and rate the LI lowest on all 11 dimensions – resulting in a total of 22 hypotheses. Fifty-eight psychotherapy educators (professors of counseling or clinical psychology) and experienced psychotherapists reviewed the three instruments and then used the author-developed Evaluation Form to respond to open-ended questions, as well as to rate and rank the three instruments on the 11 dimensions. To test the statistical significance of differences in rankings, a Friedman two-way analysis of variance was run on the ranking means for each dimension (Siegel, 1956). Where the results showed a statistically significant difference, a post hoc Wilcoxon Signed Rank test was run on each pair of inventories (II-LI, II-MI, LI-MI) to determine between which inventories the mean ranking difference(s) existed. To test the

statistical significance of differences in ratings, a one-way repeated measures ANOVA was run on the rating means of each dimension (Gall et al., 1996). Where the results showed a statistically significant difference, a post-hoc ANOVA Paired Samples test was run on each pair of inventories (II-LI, II-MI, LI-MI) to determine between which inventories the mean rating difference(s) existed. Two-tailed statistical tests were employed both to allow for results in the non-hypothesized direction to potentially reveal themselves and to use the more conservative method that would lend far greater confidence to the results (McDonald, 1999). A statistical significance level of .05 was established for the preliminary tests. For the post-hoc tests, the Bonferroni adjustment technique was used to reduce the risk of a Type I error and render the tests more rigorous and demanding. Thus, because these latter tests tested each hypothesis three times, the .05 *p* value was divided by three, yielding .017, which was rounded to .02 (Huck, 2000). All 22 hypotheses were confirmed.

## 5. Research Design and Methods

### *Choice of Research Methodology*

In order to accomplish the specific aims delineated in section 2, five integral psychotherapists (3 psychologists, and 2 psychiatrists) will participate in an “intensive single-subject design” research study within the framework of Integral Methodological Pluralism (Heppner et al., 1992; IMP; Marquis & Douthit, 2006), with each therapist providing treatment to a patient for approximately 50 sessions (if a patient drops out or achieves their goals before 36 sessions, the therapist will begin seeing another patient until they have provided approximately 50 sessions of therapy). Unlike typical (uncontrolled) case studies -- which often involve unsystematic, retrospective observations, and intermittent recording of a patient’s responses and behaviors -- an intensive single-subject design is “the systematic, repeated, and multiple observation of a patient, dyad, or group to identify and compare relationships among variables” (Heppner et al., 1992, p. 170-171).

Furthermore, consistent with an integral theory approach to research, data will be collected and analyzed to provide information according to the perspectives represented by all four quadrants, as summarized in Figure 5. An Integral Methodological Pluralism (IMP) anticipates that a coherently organized pluralism of inquiries will advance our understanding of psychotherapy process and outcome by matching the most appropriate method to each particular investigative question, with the research question given precedence (Slife & Gantt, 1999). This innovative research methodology investigates its subject of inquiry from the perspectives and methodologies of all four quadrants, and then triangulates and “tetra-correlates” the data from other methodologies into a coherent understanding (Esbjorn-Hargens, 2007).

**Figure 5. Research Methodologies Appropriate to Psychotherapy by Quadrant**

<p><b>1. Upper-Left (UL): Interior-Individual</b> Qualitative analyses of patients’ self-reports regarding their experience of therapy and their change (or lack thereof) outside of therapy; clinical analyses of patient responses to questionnaires (Stake, 2005).</p>	<p><b>2. Upper-Right (UR): Exterior-Individual</b> Empirical assessment via a battery of standardized outcome measures.</p>
<p><b>3. Lower-Left (LL): Interior-Collective</b> Intersubjectivity/Culture: Interpretive inquiry (Kemmis &amp; McTaggart, 2005) including analytic inductive investigations of the intersubjectivity between patient and therapist and their “goodness of fit.”</p>	<p><b>4. Lower-Right (LR): Exterior-Collective</b> Interobjectivity/Systems: Systemic analyses of key moments of the videotaped sessions via Greenberg’s (1999) intensive observation and analyses of concrete-change performances.</p>

### *Treatment sites and patient selection*

The five therapists participating in the study, and their sites, are identified below:

- Sarah Hubbard, Ph.D., Sheppard Pratt Health System (intervention site: Sheppard Pratt Health System).
- Janet Lewis, M.D. University of Rochester (intervention site: Soldiers and Sailors Memorial Hospital).
- Tim Black, Ph.D., University of Victoria (intervention site: Integral Counseling Services).
- Baron Short, M. D., Medical University of North Carolina (intervention site: Medical University of North Carolina).
- Elliott Ingersoll, Ph.D., Cleveland State University (intervention site: Limited Liability Corporation).
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These therapists were selected because they are all experienced clinicians (minimum of eight years of practice) who have demonstrated a level of expertise in an integral approach to psychotherapy by either publishing on integral psychotherapy and/or serving as faculty at the Integral Institute's integral psychotherapy seminars (as documented in their Bibliographical Sketches). Furthermore, they represent different disciplinary traditions within psychotherapy (i.e., psychology – Hubbard, Black, Ingersoll – and psychiatry – Lewis, Short). All five therapists have agreed to participate, as documented in the attached letters of support.

Those therapists working in hospitals and clinics will select a patient who has sought services and provides informed consent to participate in the study; those therapists working in private practice will select a patient who has likewise sought services and provides informed consent to participate in the study (both situations reflecting real-world scenarios). Every effort will be made to have as diverse as possible a sample of patients with respect to gender, ethnicity and socio-economic status. Patients will all be adults.

#### *Research Team and Site*

Data collection and analysis will be conducted by Andre Marquis (PI) with the support of two graduate research assistants at the University of Rochester. As documented in the *Preliminary Results* section, the PI is well positioned to direct this study given his expertise and prior work in integral psychotherapy. The two assistants – Deborah Hudson and Michael Tursi – are doctoral students in the counseling program who have expertise in both qualitative and quantitative research methods, and experience as therapists themselves.

The PI will have access to the expertise of the following senior colleagues at the University of Rochester as consultants with regard to the different methodologies and analyses performed in this study: Janet Lewis (Strong Medical Center, Dept. of Psychiatry), one of the participating therapists, is an expert in “negative outcomes” in psychotherapy; Brian Brent (Warner School of Education) will contribute his quantitative research methods skills and expertise; Kathryn Douthit and Doug Guiffrida (Warner School of Education) will be valuable resources for qualitative research methods. The participating therapists will also be playing a consulting role throughout the project, as initial findings and tentative explanations will be shared and discussed with them for feedback and further refinement.

#### *Data collection*

The following data will be collected to address specific research questions (*RQ*) and reflect perspectives associated with each quadrant (*Quad*):

- A. Patients' responses to the questions/items included in the Integral Intake (*RQ1; Quad 1*)
- B. Videotapes of each therapy session (*RQ1, 2; Quad 4*).
- C. The therapists' case notes, which will document in detail the principles that guided their decision-making processes throughout the treatment, as well as the progress made by the patient in the course of the treatment (*RQ1, 2, 3; Quad 3*).
- D. Audiotapes of the weekly conference calls held by the researcher with the group of five therapists for group supervision of their cases (*RQ1, 2; Quad 3*).
- E. Audiotapes of semi-structured interviews with each therapist at week 6 to gather information about how s/he used the information obtained via the Integral Intake to formulate their case conceptualization and to create a treatment plan (*RQ 1; Quad 3*).
- F. Audiotapes of semi-structured interviews conducted with each therapist at week 28 of treatment, focusing on how they are making their clinical decisions (*RQ2; Quad 3*).
- G.
- H. Audiotapes of semi-structured interviews conducted with each therapist at the end of treatment (week 50) to gather their assessment of the outcomes achieved by the patient (informing aim 3 data) (*RQ3; Quad 3*).
- I. Outcome measures gathered from patients' completion of the following instruments before, during (i.e., at weeks 8, 16, 26, and 38), and at the conclusion of treatment (*RQ3; Quad2*):
  - o Brief Symptom Inventory (BSI - Derogatis & Melisaratos, 1983): an efficient instrument with excellent reliability and validity that measures outcomes of therapy treatments as well as measures patients' progress during and after courses of treatment;
  - o Outcome Questionnaire (OQ-45.2 - Beckstead, Hatch, Lambert, Eggett, Goates, & Vermeersch, 2003): another efficient instrument with excellent reliability and concurrent and construct validity that

measures patients' symptoms, social role functioning, interpersonal problems, and quality of life – all of which are essential to mental health;

- Washington University Sentence Completion Test (WUSCT – Hy & Loevinger, 1996): a semi-projective sentence completion test that assesses ego development with excellent reliability and validity – nearly 300 studies have explored different aspects of it and the most recent comprehensive review has continued to support its construct validity (Manners & Durkin, 2001) (the WUSCT will be given only pre-treatment, end-of-treatment and 6-month follow-up);
- I. At the same occasions as (H), patients will also complete a researcher-created questionnaire with items inquiring into their experience in and out of therapy, including : (a) What effect (positive or negative) has this therapy had on you? Please be as specific as you can; (b) Have you experienced anything since the last time you completed these questionnaires that may have influenced how you feel in general or how you responded to the questionnaires you just completed? For example, a new romance, a job promotion, or a recent vacation may have had a very positive effect on your general mood; and a death of a loved one, additional stress at home or work, or an illness may have had a very negative effect on your general mood.
- J. Patients' and therapists' self-reported responses (and their discussions of) at week 8, 16, 28 and 50 to the following:
  - 
  - Session Rating Scale (SRS V.3.0; Miller, Duncan, & Johnson, 2002): a simple, 4-item visual analog scale that assesses key aspects of effective therapeutic relationships (*RQ3; Quad 3*);
- K. Brief synopsis written by each patient at the end of the treatment (week 50) about their experience of the treatment and how effective they assess it (Mahoney, 1991, p. 273-4) (*RQ3; Quad 1*).

### *Data analysis*

This rich set of data will be analyzed to address the three research questions articulated earlier in section 2 using Bogdan & Biklen's (1998) "modified analytic induction" method in which:

- broad explanatory principles are developed early in the analyses
- those broad explanatory principles are modified and refined as more data are analyzed that do not fit the earlier explanatory formulations
- the researcher actively seeks instances that are suspected not to fit the explanatory formulations
- the explanatory principles are reformulated/refined until the researcher can establish a universal relationship (or as close to universal as feasibly possible), with each negative instance requiring a refining of the explanatory principles

During the first six weeks of treatment, both the PI and the research assistants will review together selected video-taped and audio-taped data to establish a coding system to identify important moments (positive or negative) and decision points, so as to selectively identify sections of the data worthy of further investigation. A first coding scheme will be developed and refined by the research team using this first set of data, and then used consistently throughout the study. The coding scheme will place emphasis on interventions and change processes that derive from or focus on ego-development and quadratic principles, drawing specifically on the ITTI (Marquis, under review) and the scheme reported in Figure 4.

More specifically, Greenberg's "intensive analysis of concrete-change performances" protocol (1999) will be employed in the analysis of each "important moment of psychotherapy" identified within the videotaped sessions, by:

- a) Describing:
  - What – specifically – indicates that something of therapeutic significance is occurring at that moment; such patterns become patient "markers" that will constitute a periodic table of therapeutic elements
  - The specific interventions or change process the therapist utilized at those moments
  - The therapist's intention behind the intervention(s)
  - The impact (positive or negative) of the intervention(s).
- b) Conducting a rigorous task-analysis consisting of:
  - Explicating the therapist's theoretical conceptualization of what is occurring
  - Observing what is manifesting behaviorally in the important moment
  - Potentially revising/correcting the therapist's theoretical conceptualization
  - Developing measurement criteria
  - Verification of predictions (the scope of this study will allow only the first 3 of the 5 bullets under "task

analysis” in Greenberg, 1992).

Below we articulate in more detail which sub-sets of the data and which procedures will be employed to address each of the research questions.

1. *How do expert integral therapists use the information that patients provide via the Integral Intake to begin formulating case conceptualizations and to create integrative treatment plans?*

For each of the five treatments, we will use data from the patient’s responses to the Integral Intake (A), videotapes of the first six sessions (B), therapist’s case notes for the first six sessions (C), audiotapes of the first few weekly phone conferences (D) and the first semi-structured interview at week 6 (E) to:

- a) Identify the initial treatment plan chosen by the therapist and its rationale. This will be achieved by identifying what each therapist actually did in the first six sessions (i.e., what change process and interventions they utilized and when and how) by analyzing the videotapes of the first 6 sessions using Greenberg’s approach and triangulating the findings with what the therapist explicitly reported in his/her case-notes and the first semi-structured interview.
- b) Reconstruct the process by which the therapist came to that decision (again, by analyzing the video-data using Greenberg’s approach and triangulating the findings with what the therapist explicitly reported), with particular attention to:
  - o Which items in the Integral Intake they focused on and which ones they ignored, and the connections of those items with specific quadrants and ego development levels (this is especially important as one of the challenges of integral psychotherapy is the overwhelming number of variables the therapist is asked to attend to, and thus the need to provide practitioners guidance about how to strategically select and focus on the most critical variables at any one time).
  - o How they used the *Integral Taxonomy of Therapeutic Interventions (ITTI)* in matching the patient’s information gathered from the Integral Intake with available approaches and interventions. We will especially note any discrepancy from the use of the taxonomy (such as, for example, prescribing intrapersonal exploration for a patient whose anxieties derive more from social/systemic issues).
  - o To what extent the therapist utilized change processes that were consistent with their patient’s level of ego-development (as summarized in Figure 4).
  - o
- c) Analyze similarities and differences in both decisions and processes across the five therapists.

Findings will also be used to improve the current Integral Intake instrument and its accompanying documentation by:

- o Identifying which items in the current version of the Integral Intake may need to be eliminated or modified, and which items may need to be added, and modify the instrument accordingly.
- o Prepare written guidelines about how therapists can use the Integral Intake tool most effectively to formulate the case conceptualization and create integrative treatment plans, in conjunction with the ITTI.
- o Illustrate these guidelines with the description of the process followed in at least two examples.

4. *How do expert integral psychotherapists continue to make their clinical decisions regarding which change processes and interventions to use, and when, with their patient throughout the treatment?*

Selected sections of the videotaped sections (B) will again be analyzed using Greenberg’s approach and triangulating the findings with what the therapist explicitly reported (in their case notes [C], weekly conference calls [D] and semi-structured interviews [E]) to examine how each therapist continued to modify and adjust the approach and interventions used throughout the duration of the treatment.

Findings from this component of the study will also be used to select and organize data that could be used later to develop a *Treatment Manual of Integral Psychotherapy*.

2. *What is the effect of these treatment decisions, i.e., how effective are the chosen change processes and interventions with each patient?*

After the courses of treatment are finished, the researcher will first assess how effective each course of therapy was for each patient (looking at both the results of standardized outcome assessments and patients’ perceived

improvements), and then look at the relationship between those outcomes and how closely matched the chosen interventions were to the extant quadratic and developmental guidelines. It is important to note that, because this is not an experimental design, it will not be possible to isolate the effect of integral psychotherapy itself. Nonetheless, when triangulating the data gathered through multiple sources (i.e., outcome measures [H], patients' answers to the researcher-created questionnaire [I], the SRS [J], and their end-of-treatment synopsis [K]), the PI should get some valuable information about how effective integral psychotherapy was with each patient (although not a true "effect size").

More specifically, patients' treatment outcomes will be assessed as follows:

- Descriptive statistics will be performed on all of the standardized outcome measures that each patient will complete before, during, and after the treatment. Difference scores will be computed for each patient for each outcome assessment and the magnitude of change in scores compared for each patient with regard to each outcome assessment (in terms of standard deviations) to those treatments considered empirically validated treatments for patients with depression, anxiety, eating disorders, etc.
- These findings will be triangulated with the responses provided to the researcher-created questionnaire about their experience inside and out of therapy (I), the SRS (J), as well as patients' end-of-treatment synopses (K), to better understand the factors that could have affected these outcomes. More specifically, patients' end-of-treatment synopses and their answers to the researcher-created questionnaire will be analyzed by first identifying all the themes that appear for each patient; then the concordance rates of the various themes will be tallied—the frequency with which each patient indicated a theme. Special attention will be paid to discern any potential relationship between the outcomes thus assessed and how closely matched the chosen interventions/change processes were to the extant quadratic and developmental guidelines.

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These findings, combined with results from research questions 1 and 2, will also be used to:

- Assess the clinical utility of the *Integral Intake*, based on the use the five therapists made of the information gathered with this tool and the effectiveness of the decisions made as a result.
- Refine the current version of the *Integral Taxonomy of Therapeutic Interventions (ITTI)* (Marquis, under review) based on how the therapists actually matched patients' quadratic variables with specific interventions and the effectiveness of those decisions; the results will also begin to provide some empirically-based illustrations of this taxonomy.

#### *Challenges of Proposed Procedures and Potential Alternatives*

The primary difficulty/challenge of this study will involve the time-intensive nature of the predominantly qualitative research. Nonetheless, given that this is an exploratory study seeking to illuminate a greater understanding of how integral psychotherapists make their clinical decisions (which will inform a treatment manual of such) and given that the PI has performed qualitative research before and has several senior colleagues who are expert in such methods, the PI feels confident he can achieve the aims of the project. A primary limitation of this study is that – due to its small, qualitative emphasis – generalizability will be negligible and effectiveness (RQ 3) can't be measured in a manner that truly isolates the effectiveness of integral psychotherapy itself. However, because of the "youngness" of this approach, the PI believes that the merits of such an exploratory study warrant the acceptability of such a limitation.

#### *Data-sharing and Dissemination Plan*

Research findings from this study will be presented at psychology, psychotherapy, and counseling conferences, such as the annual conferences of American Psychological Association, Society for the Exploration of Psychotherapy Integration, and American Counseling Association, and published in journals such as *Psychotherapy*; *Psychological Bulletin*; *Journal of Consulting and Clinical Psychology*; *Psychotherapy: Theory, Research, Practice and Training*; and *Journal of Counseling Psychology*. A revised version of the Integral Intake and accompanying guidelines and illustrations could appear in a second edition of Marquis (2008), or be published separately if a second edition is not requested. Moreover, summary reports of how each therapist approached specific decisions will be made available to other interested researchers upon

request.

*Timetable (assuming grant award with April 2009 start-date)*

1. *July 2008 (prior to grant award)*: Apply to and obtain approval from the University of Rochester's Research Subject Review Board (RSRB)
2. *April 2009*: Each therapist selects a patient; after agreeing to participate in the study by signing the consent form, each patient will take the battery of pre-intervention assessments.
3. *May 2009-April 2010*: The therapy begins and continues for approximately 50 weeks, with data collection occurring concurrently as described earlier.
4. *May-June 2009*: preliminary analysis of data by the research team to establish systems and coding.
5. *July 2009-March 2009*: Analysis of RQ1 and preparation of related publications.
6. *May 2010-November 2010*: Analysis of RQ2 and preparation of related publications.
7. *July 2010*: 3-month follow-up data collection.
8. *October 2010*: 6-month follow-up data collection.
9. *November 2010-March 2011*: Analysis of RQ2 and preparation of related publications.