Using a Three-Dimensional Theoretical Orientation Matching Model to Predict Therapeutic Outcomes

Daniel Rhodes
Duquesne University

Follow this and additional works at: https://dsc.duq.edu/etd

Recommended Citation

This Immediate Access is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Duquesne Scholarship Collection. For more information, please contact beharyr@duq.edu.
USING A THREE-DIMENSIONAL THEORETICAL ORIENTATION MATCHING MODEL TO PREDICT THERAPEUTIC OUTCOMES

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for

the degree of Doctor of Philosophy

By

Daniel Rhodes

December 2023
USING A THREE-DIMENSIONAL THEORETICAL ORIENTATION MATCHING MODEL TO PREDICT THERAPEUTIC OUTCOMES

By

Daniel Rhodes

Approved Month Day, and Year of Defense

Dr. Matthew Joseph
Associate Professor of Counselor Education
(Committee Chair)

Dr. Gibbs Kanyongo
Professor of Educational Statistics
(Committee Member)

Dr. Jered Kolbert
Professor of Counselor Education
(Committee Member)
ABSTRACT

USING A THREE-DIMENSIONAL THEORETICAL ORIENTATION MATCHING MODEL TO PREDICT THERAPEUTIC OUTCOMES

By

Daniel Rhodes

December 2023

Dissertation supervised by Dr. Matthew Joseph

Matching helpers and clients in a therapeutic setting is inefficient and ineffective. So far, there are no significant and enduring variables that reliably match helpers and clients that lead to positive therapeutic outcomes. This study attempts to match helper and client using theoretical orientation. It uses a quantitative methodology to predict therapeutic outcomes given match quality in the therapeutic dyad. Participants were 30 dyadic pairs—consisting of one helper and one client—who had a pre-existing therapeutic relationship. Each was given an assessment tool, used to measure their theoretical orientation to psychotherapy. Results showed no statistically significant relationships between theoretical orientation match and therapeutic outcomes. Limitations (such as low participation rates) and future research directions are discussed.
ACKNOWLEDGEMENT

I want to acknowledge the saint-like patience of Dr. Matthew Joseph. Without his sagacity and near-Buddha-like calmness, I doubt that this dissertation would have been produced at this speed, at this quality, and possibly at all. Matt, you know how to talk to me in a way that helps me. I will always appreciate this about you.

Similarly, the help I received from Drs. Kanyongo and Kolbert allowed this work to progress and helped me get past some insecurities and worries I have.

I also want to acknowledge the previous work of Dr. Duane Halbur and Dr. Kimberly Vess Halbur. Without their work, mine might not have been imagined and realized.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iv</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>v</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td></td>
</tr>
<tr>
<td>Overview</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose and Research Questions</td>
<td>2</td>
</tr>
<tr>
<td>Statement of Potential Research Significance</td>
<td>3</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>4</td>
</tr>
<tr>
<td>Summary of Methodology</td>
<td>5</td>
</tr>
<tr>
<td>Limitations</td>
<td>7</td>
</tr>
<tr>
<td>Definition of Key Terms</td>
<td>7</td>
</tr>
<tr>
<td>Chapter 2: Review of the Literature</td>
<td></td>
</tr>
<tr>
<td>Common Factors</td>
<td>12</td>
</tr>
<tr>
<td>Psychotherapeutic Forces and the Development of Psychotherapy</td>
<td>13</td>
</tr>
<tr>
<td>The Process of Learning a Psychotherapeutic Theoretical Orientation</td>
<td>17</td>
</tr>
<tr>
<td>Eclecticism and Orientation Integration</td>
<td>23</td>
</tr>
<tr>
<td>Client-helper Matching</td>
<td>25</td>
</tr>
<tr>
<td>Matching Assessments</td>
<td>28</td>
</tr>
<tr>
<td>Time</td>
<td>32</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>
Chapter 3: Methodology ........................................................................................................ 41
  Overview of the Study ........................................................................................................ 41
  Sequence of Steps for Developing Study ........................................................................ 41
  Statistical Analysis ........................................................................................................ 49
  Data Screening and Preparation ..................................................................................... 51
  Human Participation and Ethics Precautions ................................................................. 54

Chapter 4: Results ............................................................................................................... 57
  Factor Analysis ............................................................................................................... 58
  Test 1: Multivariate Multiple Regression ....................................................................... 59
  Test 2: Multivariate Regression .................................................................................... 60
  Test 3: Covariate Analysis with Process Macro ............................................................ 60

Chapter 5: Conclusion ....................................................................................................... 62
  Limitations .................................................................................................................... 63
  Contributions ............................................................................................................... 66
  Common Factors .......................................................................................................... 68
  Future Work and Commentary ....................................................................................... 70
  Conclusion .................................................................................................................... 73

References ........................................................................................................................ 75

Appendix A: Assessments .................................................................................................. 90

Appendix B: Theoretical Sketches ................................................................................... 95

Appendix C: Statistical Analysis Tables ........................................................................... 97

Appendix D: IRB Approval Letter .................................................................................... 102
Chapter 1: Introduction

Overview

The purpose of this research is to better understand how theoretical orientation congruence between client and helper relates to therapeutic outcomes. It seeks to establish a “distance” between quantified variables of theoretical orientation of a client and their helper, measuring the congruence between these two orientations. Essentially, this study continues past research having to do with the subject of matching—that is, the method that is used to connect a client to a helper to start therapy.

This study addresses two problems in the matching literature. First, this study strives to create a variable for a client that can be compared to the well-established notion of helper theoretical orientation directly, rather than use other variables as proxies. Second, this research aims to create understanding as to the existence of a relationship between the degree of agreement between client and helper orientations, and therapeutic outcomes. This may help to better create a system to match clients and helpers before therapy, ensuring a more congruent therapeutic relationship and possibly more efficient and/or effective episodes of therapy.

Statement of the Problem

Matching clients to helpers has long been an area of research among counseling academics. Frankel (2004) discusses myriad different types of matching, many of which do not meet criteria as viable matching processes. After a rigorous review of the literature, I have found that few matching data are viable across primary sources and subsequent meta-analyses.

It is no secret that there are significant barriers for clients who would like to engage in psychotherapy (Mohr et al., 2006; Peppin et al., 2009; Rudow, 2012). Pepin et al. (2009) found that participants ranked “belief about [their] inability to find a psychotherapist” (p. 774) as the
first or second highest barrier to seeking or receiving therapeutic assistance, depending on age group. Popular sources including Psychology Today and WebMD advise prospective clients to ask others (e.g., friends and family), call around to multiple helpers, and engage in several appointments—resulting in their admission that this process is ineffective (Cleantis, 2011; Davis, 2004). These many steps can lead to increased frustration by clients in finding their best possible helping match, resulting in decreased rates of engagement in therapy (Mohr et al., 2006).

A second problem in the matching research is that researchers have not yet organized a useful way to match clients with helpers (Frankel, 2004). Some proxies, such as demographic, worldview, and socioeconomic matches (Atzil-Slonim et al., 2018; Behn et al., 2018; Cabaral & Smith, 2011) exist, but a true analog to helper theoretical orientation does not. As such, the idea of matching is doomed to fail without a direct parallel for both helper and client.

These problems make it clear that a better matching medium must be devised to consistently match client to helper, thereby decreasing barriers to entry for clients engaging in therapy. This study endeavors to use data from existing dyads to understand the relationship between client and helper match and therapeutic outcomes.

**Purpose and Research Questions**

This study will create the client-side analog to helper theoretical orientation and measure its effectiveness a posteriori. To meet these goals, three research questions are posited. The first research question asks: Do clients' and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? The hypothesis is that outcomes are similar across helper theoretical orientation and client intrinsic orientation.
The second research question asks: Does degree of match between clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? The hypothesis is that as distance between client and helper orientation decreases (i.e., they are more similar), therapeutic outcome increases. The model of measuring orientation in this study is inherently integrative and may thus yield a better understanding of the complex nature of matching than does one theoretical orientation.

The third research question asks: What is the moderating effect of time on the relationship between therapeutic outcome and orientation agreement? The hypothesis is that time has a moderating effect on the relationship between theoretical orientation congruence and therapeutic outcomes. In this study, time refers to multiple variables, namely length of time in therapy in the client’s lifetime, amount of clinical experience of the helper, and number of completed sessions between the client and the current helper.

**Statement of Potential Research Significance**

The potential significance of this research is manifold. First, this study could potentially reinvigorate multiple areas of research that seem to have been given minimal attention in recent years. Common factors research, matching, and eclecticism are not areas of inquiry that are fully plumbed and understood. There are many questions that have not yet been asked that might lead to further epiphanies and increased outcomes for clients.

Second, if this study shows significant results, a further effort can be made to operationalize it in the form of an online system. This system would take in more data than this study provides (such as factors having to do with worldview, demographics, learning styles, and personality) and use it to better match client and therapist. Such a system might help to partner
clients and helpers efficiently and effectively. Moreover, given the push for portability between American states, the success of this research could lead to a better system to match client and helper in a greater field.

Third, this study might broaden into other sub-fields of counseling research. The three-dimensional model of counseling theories could be used as a “heat map,” allowing researchers to find the gaps in the model where clinicians tend to not practice and, conversely, those spaces that they saturate (See Figure B1 for more information). This model and these ideas might open a whole field of inquiry: Should the empty spaces be filled with education and programs, or should they be left alone? Depending on which answer, why? We could also use these data to find what types of helpers inhabit what spaces and possibly engage a qualitative study as to why this phenomenon (if indeed there is one) might be occurring.

Lastly, this study could lead to additional research along the lines of mass usefulness of schools of theories. Practitioners might be able to understand more how clients perceive themselves in therapy and how a helper can best react (or be matched) to that philosophy. This research could also help to understand types of clients, based on “cube zones” that could be formed from the three-dimensional model that this study creates (see Figure B2 for a helpful visual aid). Similarly, this research could identify types of helpers, which would be created from the same cube zones in the model. Understanding where helpers and clients find themselves in the model could help to better inform how helpers are trained. For example, if the model shows that most helpers exist in the absolute center of the model (scoring midway in all axes) and clients normally score on the extremes (scoring minimally on one or more axis and highly on the other(s)), it could help the field to re-engineer education programs based on the needs of the clients.
Theoretical Framework

This study is founded on the idea, which is well-researched and validated throughout many papers (see Chapter 2), that matching client and helper is a multi-faceted process that cannot adhere to just one factor (e.g., worldview, religious orientation, ethnicity, language/dialect). While many of these factors have been tested, few result in replication studies that show viability. As such, there is a need to find a factor that could be used to understand the client and the helper on a similar plane, while being specific enough to understand and be tested.

This study uses Halbur and Halbur’s (2011) Intentional Theory Selection (ITS) model as a foundation to inquire about helper and client orientation. This paper adds on to the ITS model by assuming that clients have their own orientation to therapy and uses the assumptions in the ITS model to allow comparison of helper and client orientation.

Summary of Methodology

This study uses quantitative methods to explore the relationships between the independent variable, orientation congruence; and the dependent variables, therapeutic outcomes; as well as the effect on these by the covariate, time (i.e., number of years the helper has been in practice, the number of years the client has been in therapy overall, and the number of completed sessions in the dyad). This study attempts to answer the overarching question as to how different levels of congruence between client and helper orientation to therapy predict therapeutic outcomes.

For the quantitative method, a current survey will be adapted. A version of the Selective Theory Sorter - Revised (STS-R) (Halbur & Halbur, 2019) will be used to create a three-dimensional model of orientation, comparing coordinates along continua of psychodynamic, behavioral, and humanistic assumptions in counseling.
This study requires at least 32 dyads, as suggested by G*Power, to achieve ample statistical power to detect meaningful effects. The sample consists of dyads, meaning that each sample datum is composed of two individuals: a helper and a client. The helper-side sample for this study is private practice therapists of three specific helping professions: a) counselors, b) licensed clinical social workers, and c) clinical or counseling psychologists. I chose this helper sample because community settings (e.g., hospitals and clinics) have policies around intellectual property. That said, if I cannot reach the 32 helpers needed, I will also query community helpers to reach the required power. The clients will be those already in a therapeutic relationship with one of the helpers of the sample. This style of chain-referral sampling is integral to this study, as it would not be feasible to set up an experiment to create relationships between helpers and clients and must therefore rely on relationships that already exist.

The first research question asks: Do clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? A multiple multivariate regression was run, with each helper and client therapeutic orientation family (psychodynamic, behaviorism, and humanism) as independent variables and four therapeutic outcomes—personal, interpersonal, social, and general wellbeing—as the dependent variables.

The second research question asks: Does degree of match between clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? A multivariate regression will be used to investigate the relationship between...
the theoretical orientation match and outcome variables, above and beyond the contribution of the demographic and time variables.

The third question asks: What is the moderating effect of time on the relationship between therapeutic outcome and orientation agreement? The third research question requires three moderation analyses to be run using the PROCESS macro in SPSS, one for each time variable.

Limitations

Limitations of this study are manifold. First, the sample size for the study was not met. Only 30 out of the 32 required dyads were recruited. It is possible that 32 dyads was also underpowered (Stevens, 2002). Second, this study requires the use of a new assessment tool, which has not been previously psychometrically validated. Third, the nature of the construct “client theoretical orientation” is theoretical. A qualitative study would need to be created to answer whether or not there is true client theoretical orientation. Finally, most of the participants were in Pittsburgh, possibly leading to a skewed data sample.

Definition of Key Terms

A few key terms are central to this study and will be used consistently throughout this manuscript. They include a) psychotherapy, b) helper, c) client, d) matching, e) theoretical orientations, and f) client intrinsic orientation. Further discussion on these subjects will continue in the literature review itself.

Psychotherapy

There are multiple synonyms to psychotherapy, including therapy, counseling, interviewing, questioning, etc. This study will use the term psychotherapy as the aggregate noun for these descriptors to include all relevant helpers. Essential beginner texts about therapy do not
seem to give a standard definition. Ivey et al. (2012) only say that psychotherapy is a “science and [an] art” (p. 5). Wedding and Corsini (2019) similarly do not define psychotherapy in their textbook on the subject. This might have to do with the difficulty in creating a definition out of seemingly disparate hierarchical points of importance inherent in different theories. Wampold (2010) is given credit by the American Psychological Association with this definition:

“Psychotherapy is a primarily interpersonal treatment, based on psychological principles, and involves a trained therapist and a client who has a mental health disorder, problem, or complaint, is intended by the therapist to be remedial for the client disorder, problem or complaint, and is adapted or individualized for the particular client and his or her disorder, problem or complaint.” (p. 8).

Helper

The idea of a helper in psychotherapy is complicated and the role is taken by many different groups of trained professionals. Wampold (2010) once again gives a good understanding of who can be considered psychotherapeutic helpers. He includes, “. . . psychologists, psychiatrists, counselors, marriage and family therapists, and social workers . . .” (p. 8) as those who use psychotherapy to help clients. I agree with the definition, though the study does not include psychiatrists as helpers, mainly due to their lack of training in psychotherapy.

I must remark on the differences between these groups. Psychologists who practice psychotherapy are generally separated into two groups: clinical psychologists and counseling psychologists. The difference between these seems to come from historical traditions in each field, educational methodologies, and the orientation “toward people without serious or persistent mental illnesses” (counseling psychology) or those with them (clinical psychology)
(Hammer, 2018; Price, 2009). Psychologists practice with doctoral degrees, including doctorates of philosophy (PhDs) or doctorates of psychology (PsyDs). Psychology programs are accredited by the American Psychological Association.¹

Counselors, marriage and family therapists, and social workers complete the list of helpers. These groups are similar in that their terminal degree is not a doctorate, but is instead a master’s degree. These groups differ in their training orientations and methodologies toward psychotherapy, including number of courses, intensity, and breadth of instruction. A full understanding of the similarities and dissimilarities of these programs is beyond the scope of this study. There do exist doctoral programs that continue instruction after all of these programs, though they are not needed to become licensed in the field. The main accrediting bodies for these programs include the Center for Accreditation of Counseling and Related Programs (CACREP), the Commission on Accreditation for Marriage and Family Therapy (COAMFTE), and the Council on Social Work Education (CSWE), respectively.²

There are a few groups that do not show up in this definition and are worth noting why. Paraprofessionals (such as technicians, Bachelor's-level clinicians, or milieu therapists) and life coaches are not identified. This study does not take these groups into account either, due to lack of training of a clinical nature, resulting in lack of orientation to therapy, which cannot be used in this study.

¹ See https://www.accreditation.apa.org/accredited-programs for more information on APA accreditation procedures.
² See https://www.cacrep.org/accreditation/ for more information on CACREP accreditation procedures. See https://www.coamfte.org/COAMFTE/Accreditation/About_Accreditation.aspx for more information on COAMFTE accreditation procedures. See https://www.cswe.org/Accreditation.aspx for more information on CSWE accreditation procedures.
Client

The term client is possibly the easiest term to define in this paper. A client is simply anyone seeking aid from a helper, as defined above. Few, if any, sources define the role of clients in therapy. I will refer to this group as clients and not as patients or any other grouping name in this study, though, in the broader literature, the terms are somewhat interchangeable (McLaughlin, 2009).

Matching

Bordin (1979, 1994) uses a proxy for a match between client and helper (therapeutic alliance) to define matching as centering around congruent goals in therapy, methods to meet the goals, and the emotional relationship that the dyad creates. There is much research on different qualities to match between client and helper (Arizmendi et al., 1985; Atzil-Slonim et al., 2018; Jones & Zoppel, 1982). This study will concern itself with the match between helper theoretical orientation and client intrinsic orientation.

Helper Theoretical Orientation

Helper theoretical orientation, as previously described, exists to attempt to define the process by which a helper uses psychotherapeutic method(s) to assist a client in the meeting of goals. Matthews and Marshall (1988) suggest that helper theoretical orientation provides a structure for helpers to assess and conceptualize clients, engage the therapeutic alliance, intervene, and evaluate intervention effectiveness. Similarly, Poznanski and McLellan (1995) assert that helper theoretical orientations allow helpers to create theories about clients’ thoughts, feelings, and behaviors, use techniques competently, and evaluate treatment’s effectiveness.
Client Intrinsic Orientation

The matching literature discusses many standards on which to base a match between helper and client, as will be covered in Chapter 2. Helpers have a way, called theoretical orientation, mentioned above, that assists them in understanding how they practice. Using the definition for that, we can easily substitute not the helper’s method in helping clients, but the client’s innate perspective toward therapy. It should be noted that clients cannot have a helper theoretical orientation, as one can only be gained after formal education and experience as a trained helper (e.g. counselor, social worker, psychologist). The current definition is thus: Client intrinsic orientation exists to attempt to define the process by which clients innately understand the world psychotherapeutically and thus orient themselves toward the field and its practice. This study assumes that client intrinsic orientations fit with some helper theoretical orientations over others. The term client intrinsic orientation is one that I have coined myself, given the lack of previous conceptualization in the literature (as noted previously).
Chapter 2: Review of the Literature

This literature review covers myriad topics as they apply to the goal of this research. This helps to construct a knowledge platform, including a discussion on the relevant background information needed to understand the study, as well as the gaps in the literature that this research attempts to fill. In addition to these topics, a conceptual framework for this study is discussed, as are the research questions and their relevance to the field.

The methods of performing the literature review are manifold. First and foremost, the method of research and notation follow the latest form of direction discussed by the American Psychological Association (APA) in their Publication Manual (American Psychological Association, 2020). Second, most of the research completed was composed of electronic methods, such as journals and databases available to Duquesne University’s students. Public literature was consulted, such as articles from websites like WebMD.com and Counseling Today. These non-peer-reviewed articles were used to show the quality and breadth of information available to the layman, who most likely is not connected to the research resources of a major university. Third, an attempt was made to keep the literature review’s date criteria to within the past twenty years, but the cyclical nature of any subject of research made this difficult, though not impossible. The oldest article is from the 1930s and is a seminal article.

The rest of this literature review discusses the specific topics relevant to start the discussion of this study, including a) common factors, b) psychotherapeutic forces and the development of psychotherapy, c) the process of learning a psychotherapeutic theoretical orientation, d) eclecticism and orientation integration, e) client-helper matching, f) matching assessments, and g) time.
Common Factors

Starting very early in the history of psychotherapy, researchers endeavored to increase their understanding about it and the main ways to increase its efficiency. One research endeavor was called common factors. In his seminal paper entitled “Some Implicit Common Factors in Diverse Methods of Psychotherapy,” Rosenzweig (1936) theorized that therapist-side factors, such as orientation, personality, and time spent in the field, cannot be the only factors that impact therapeutic outcomes. He made the case that there must be other factors, including “(1) the operation of implicit, unverbalized factors, such as catharsis, and the as yet undefined effect of the personality of the good therapist; (2) the formal consistency of the therapeutic ideology as a basis for reintegration; (3) the alternative formulation of psychological events and the interdependence of personality organization as concepts which reduce the effectual importance of mooted differences between one form of psychotherapy and another” (p. 9). These ideas are clearly a product of the prevailing theory of the time, namely psychoanalysis, though do show a forward and generalized thought process that encouraged continued research in the field.

Since the mid-1930s, there has been much contention among researchers as to what the main common factors in therapy are. In 1951, Fiedler studied the same construct and noted similar findings, writing that “therapeutic relationship is not a function of a particular theory or technique but rather of other determinants which are concomitant with expertness and therapeutic skill” (p. 32). This is to say that understanding a central idea of therapeutic alliance is not best described by the experience or even the skill of the clinician, but rather some other factors that are associated with those. Indeed, he found that there seemed to be more similarity in outcomes among experienced helpers from multiple orientations than inexperienced ones of
varying schools. The identification of therapeutic alliance as an important factor in therapy is important here and continues on throughout the evolution of common factors.

Based on the study and its method, there have been innumerable common factors cited and tested. Indeed, as different movements in therapy came along, the development of common factors changed as well. Lambert and Ogles (2014) described the years since Rosenzweig’s seminal paper as a confusing and undefined era: “. . . [I]t should be emphasized that some slippage in the term ‘common factor’ has occurred over time. . .” (p. 501). They go on to describe many researchers’ views of common factors being chiefly in the realm of client-helper relationship and less about technique or theoretical orientation. This synthesizing article starts the discussion of overarching categories of common factors, which include, but are not limited to orientations.


After an overview of the research, the Heart and Soul model was chosen as a guiding common factors model (Hubble et al., 1999). The Heart and Soul model of common factors was much newer than the original research described by Rosenzweig. It accounts for multiple meta-analyses and additions that fundamentally changed Rosenzweig’s common factors, while keeping, it seems, his general conjecture (Rosenzweig, 1936) as a rule. This model was one of
the most modern and parsimonious frameworks for common factors, allowing it to be used by any researcher.

The authors of the Heart and Soul model (Hubble et al., 1999) of common factors made a concerted effort to engage common factors from a centralized standpoint, eschewing those ideas, unlike Wampold (2001), that explained very little variation in research outcomes or practice effectiveness. As such, the language was clearer than Wampold’s study and easier to apply to both practice and research. While the Heart and Soul model (Hubble et al., 1999) was not the most modern model of common factors reviewed here, it was easier to work with and manipulate than the arguably more expansive contextual model (Wampold, 2001).

Four common factors comprise the Heart and Soul model (1999), which were adapted from Lambert’s (1992) meta-analysis of dozens of factors previously proposed or investigated in the literature. These four factors are a) extratherapeutic factors; b) hope, placebo, and expectancy factors; c) relationship factors; and d) model and technique factors (Hubble et al., 1999).

Extratherapeutic factors are manifold. These factors have mainly to do with innate and situational qualities of the client. These might include such constructs as personal strength and willpower, as well as personal history and genetics. The diet of a client and their feelings about their benefits package at work are good examples of more situational extratherapeutic factors that can affect therapy. Extratherapeutic factors are those aspects of the client that are inherently theirs—those qualities that might lead to spontaneous improvement in functioning without the need of counseling. The next group of factors, including hope, placebo and expectations, make up the second group of common factors. Placebo refers to a client’s innate ability to self-heal, given any—even a less efficacious—type of treatment. Hope refers to a client’s belief system around treatment, specifically whether it might or might not actually work. Expectancy refers to
a client’s overall expectations, whether helpful or hindering, that a treatment and its method will help. There is much overlap among these three variables, even in their definitions, which is one reason why they are grouped in one common factor. Relationship factors hold the relationship between counselor and client as primarily important. Research suggests that there is high correlation between positive outcomes of therapy and the early formation of the relationship between the counselor and the client. Relationship factors are also known as the therapeutic relationship or the therapeutic alliance. Model and technique factors, when applied to common factors have to do with how a counselor practices; specifically, this common factor describes what type of orientation he or she uses and what change techniques are employed in the care of the client. This factor attempts to distill those commonalities between different theories and use them as some of the explanatory factors in change in therapy.

The Heart and Soul Model of common factors shows that psychotherapeutic outcomes vary in specific ratios (Lambert, 1992; Hubble et al., 1999). Extratherapeutic factors account for around 40% of psychotherapeutic outcomes. Hope, placebo, and expectations account for around 15% of psychotherapeutic outcomes. Relationship factors make up around 30% of psychotherapeutic outcomes. Model and technique factors account for around 15% of psychotherapeutic outcomes (Hubble et al., 1999). This means that changes in extratherapeutic factors, including the system in which the client lives and the situations in which they find themselves, typically have the most impact on clients, while changes in relationship factors (e.g., amount of cohesion in the therapeutic relationship, similarities in background, etc.) typically has the second-greatest impact on client outcomes. Model/technique factors and placebo/hope/expectancy tie for the least amount of impact on client change outcomes. Though
relatively smaller, these final variables are still significant contributors to client change overall (Leibert, 2011).

The theoretical orientation matching process between client and helper was informed primarily by model and technique factors and relationship factors. Model and technique factors and relationship factors accounted for 15% and 30%, respectively, of therapeutic outcomes (Hubble et al., 1999). Therefore, theoretical orientation matching correlated with around 45% of outcomes in the common factors model (Leibert, 2011). This showed that the relationship and orientation used by the helper was integral to helping spur change in the client. This study endeavored to understand the match between client and helper orientation, which was built upon the common factor ideas of therapeutic alliance and model and technique factors.

**Psychotherapeutic Forces and the Development of Psychotherapy**

The beginning of the treatment of maladaptive human behavior occurred, arguably, around 10,000 BCE. Shamanism predates current psychotherapies and was rooted in rituals combining cultural, religious, and moral views to help to cure and soothe maladies (Pickren, 2014). More recently with the advent of psychotherapy, researchers and practitioners have attempted to categorize the main theories and aggregate areas of inquiry of the burgeoning field. In their literature review, Fleuridas and Krafcik (2019) point out the five forces that researchers have labeled so far as psychoanalytic, behavioral, humanistic-existential, multicultural, and social justice.

Psychotherapeutic forces can be split up into two categories: theoretical and paradigmatic. The first three forces were theoretical and foundational in nature to what it is now known as psychotherapy. They were labeled as forces primarily in the 1960s, as humanism was increasing in practice. Humanism was a reaction to the established theoretical norms of
psychoanalysis and behaviorism at the time. This paralleled the cultural revolution occurring in the United States at that time (Fleuridas & Krafcik, 2019).

The second two forces were more practical in nature and for Smith et al. (2009) were viewed as a “recurring wave” (p. 484) in the history of psychotherapy. Multicultural counseling and social justice were seen by some researchers as ideas that are at the root of psychotherapy (specifically counseling) and should be ideas to which helpers return to inform their practices (Toporek et al., 2006). Ratts (2011) mentions that theories are needed in direct counseling, yet advocacy—inhem multicultural counseling and social justice—is also an integral practice in psychotherapy, especially in modern practice.

The first force in psychotherapy was psychoanalysis. Psychoanalysis was developed by Sigmund Freud in the 1890s, when he began “an intensive self-analysis of his own unconscious” (Hall, 1954, p. 15). This inquiry led to the idea of dynamic psychology and produced many multiple off-shoots, including Jungian analysis, Lacanian analysis, Dasein analysis, ego state psychology, object-relations psychotherapy, self-psychology, individual psychology, and transactional analysis, just to name a few. Indeed, as Gay (1989) wrote in his introduction to The Freud Reader:

Freud is inescapable. It may be commonplace by now that we all speak Freud whether we know it or not, but the commonplace remains both true and important. Freud’s terminology and his essential ideas pervade contemporary ways of thinking about human feelings and conduct. Even critics who find psychoanalysis both as a therapy and as a theory of mind fatally flawed will catch themselves borrowing such Freudian categories as repression and narcissism to make knowing comments about the deeper meaning of slips or resorting to the Oedipus complex to interpret family tensions. (p. xiii)
It was from Freud that other forces in psychotherapy spring. The next, behaviorism, was a direct response to the non-positivist enigma of Freudian psychoanalysis.

Psychodynamic psychotherapy increased in breadth and depth after the initial creation of Freud’s psychoanalysis. Freud himself changed his theory throughout his lifetime, frequently contradicting earlier notions in later works (Wedding & Corsini, 2019). Rather than strictly adhering to Freud’s edicts around structural theory, dream analysis, and unconscious motivations, his contemporaries and successors increased the idea of psychodynamic psychotherapy to further depths. Some famous examples of this include Carl Jung’s Jungian analysis, Melanie Klein’s object relations theory, and Heinz Kohut’s self-psychology (Wedding & Corsini, 2019). Even today, psychodynamic psychotherapy in its entirety flourishes across the world and is seen frequently as the most complete, if not prolific, group of theories about human personality and growth in existence (Aronson & Scharfman, 1983).

The second force in psychotherapy was behaviorism. In Toward a Psychology of Being (1962), Abraham Maslow discusses the “experimental-positivistic-behavioristic” (pg. vi) orientation toward psychology and psychotherapy, inherently noting the differences between itself and its predecessor. While psychoanalysis was not structured and clean (indeed, one of the largest concerns in psychoanalysis is that of countertransference), researchers in behaviorism dealt mainly with behavior—that is, “an investigation of the physiological activity of the cerebral cortex” (Skinner, 1974, p. 7). The main researchers in behaviorism are relatively well known by name, even to the layperson, and include John Watson, Ivan Pavlov, and B. F. Skinner.

Behaviorism also changed with time and increased attention. Later theorists such as Aaron Beck, Albert Ellis, and William Glasser increased its tenets to not only action and visible change, but also to cognition, creating the sub-field of cognitive-behavior therapy. This heading
can be split up into cognitive therapy, rational emotive behavior therapy, and reality therapy. These therapies seek to find interventions that do not depend on the mysticism of Freud (Eigen, 2001). Rather, behaviorism and cognitive-behaviorism were to be data-driven and replicable to many prospective clients (Beck, 2011).

The next step in psychotherapy had roots in psychoanalysis and was being incubated during the initial popular period of behaviorism in the 1920s and 1930s. This was the third force of psychotherapy, otherwise known as the humanistic-existential force (hereafter referred to as humanism), and was identified in the early 1960s (Fleuridas & Krafick, 2019). This group of theories might be best summarized by Rogers’s (1951) attempts at explaining his form of humanistic psychotherapy—now known as person-centered therapy—as congruence, unconditional positive regard, and empathy (Rogers, 1957).

While Rogers’s ideas were at the core of this force, it is not without its additions and contraindications. Laura and Fritz Perls (1951) challenged many notions of Rogers’s work with their Gestalt therapy, which, at its core, was more open to conflict and non-avoidant discussion of core concerns than Rogers’s method. Existential psychotherapy, such as that theorized by Rollo May (1969) and Viktor Frankl (1967, 1984) included a much more analytic approach to psychotherapy, due in this case to the previous training of both authors in psychoanalysis. Irvin Yalom (1980) wrote the seminal theoretical work about existential psychotherapy and has updated it over the continuing years. Yalom’s existential psychotherapy pushed prospective clients to find their own meaning and to decrease avoidance of large and seemingly inescapable existential truths in favor of deep consideration and increased reflection and insight.

The fourth force in psychotherapy increased understanding and attention toward multicultural differences and inclusion. Sue et al. (1992) wrote the seminal call to action about
multicultural competency. As the article notes, “[. . .] this document was considered so important that many recommended its publication in the *Journal of Counseling & Development* to reach the largest audience possible” (p. 477). Sue et al. (1992) outlined the general rationale for a multicultural approach to be added to education regimens, ethical codes, and trainings. Later books expounded on their efforts and increase the theory and practical applications behind this needed area of study in psychotherapy (Sue, 1996; Sue et al., 1996, 1998). These works increased awareness for the need for multicultural content in helpers’ ethical codes (Walker & Staton, 2000).

Multiculturalism in psychotherapy applies to more than race or ethnicity. Fleuridas and Krafcik (2019) discussed the wide-ranging topics that this force entailed, including feminism, family therapies, ecopsychology, and transpersonal psychology. As Pedersen (1999) quotes, uniting themes for the fourth force in psychotherapy included “(a) a greater tolerance of ambiguity, (b) more emphasis on subjectivity, (c) an appreciation of nonlinear dynamics, (d) the recognition of multidimensional truths, and (e) the value of qualitative research methods” (Fleuridas & Krafcik, 2019, p. 7). This showed that multiculturalism was a force that increased the breadth of psychotherapy, enriching its research possibilities and application.

The fifth force in psychotherapy was social justice. Though there were similarities between the fourth and the fifth forces, as far as advocacy, education, and justice, the field of psychotherapy continued the paradigm shift to social justice (Ratts, 2009; Ratts et al., 2010; Ratts et al., 2016; Ratts & Pedersen, 2014; Fleuridas & Krafcik, 2019). Social justice continues the expectation of helpers to enact change not only in the office, but also to a greater degree through governmental lobbying.
Attention to issues related to social justice has long been primarily under the auspices of social work (Swenson, 1998) and has only recently made it into the curriculum for counselors (Council on the Accreditation of Counseling and Related Educational Programs, 2015). New counselors are taught the importance of this practice and how it is helpful for clients in teaching self-advocacy and building a foundation for the awareness of social problems and subsequent correction.

In their article on the five forces in psychotherapy, Fleuridas and Krafcik (2019) increased the scope of the discussion by suggesting a sixth force. They called this “a[n] integrative, holistic, inclusive approach” (p. 9). They described the general trend of psychotherapy toward unification and integration, specifically through the examples of meta-theories, such as multi-perspective approach to counseling (Ivey et al., 2012) and integral metatheory (Wilber, 2000, 2006). These approaches to psychotherapy are not yet widespread and, just like the naming of the force itself, will take some time to integrate into the current psychotherapeutic Zeitgeist.

The forces in psychotherapy support the need for this research. This study splits theories into three distinct categories: a) psychodynamic, b) behavioral, and c) humanistic. These are supported by the first three historical forces in the model and are the three oldest, and subsequently best researched families of theories in the literature. Psychoanalysis was developed around the year 1900, psychotherapeutic behaviorism (work done by Skinner and called “operant conditioning”) was developed in the 1930s and humanistic psychotherapy (called “client-centered therapy” at the time by Rogers) was later developed in 1942 (Collins et al., 2012). More integrative therapies were developed later, such as reality therapy in the 1960s (Glasser, 1965), narrative therapy in the late 1970s and early 1980s (Madigan, 2011), internal family systems
(IFS) in the 1980s (Schwartz & Sweezy, 2019), and eye movement desensitization and reprocessing (EMDR) in the late 1980s (Davidson & Parker, 2001).

Much matching research has been completed about worldview, ethnicity, and demographics and will be discussed in the coming section marked Matching. These correspond with the fourth and the fifth forces in psychotherapy. The potential sixth force and the remaining postmodern theories noted in the fourth force are also taken into consideration in the research model. As the psychodynamic, behavioral, and humanistic approaches are all on axes, the coordinate point is an amalgamation of those three fundamental theories. In effect, the coordinate point is an integrative one, taking in continuum data from all three theory families.

**The Process of Learning a Psychotherapeutic Theoretical Orientation**

The selection of a theoretical orientation is a beginner stepping stone for students of psychotherapy. This choice can impact their learning for years to come and can help them to understand their clients at a deeper level. The process of selecting an orientation is multi-layered, depending on the type of educational program a student might enter, their advising structure in that program, their advising structure and ongoing supervision outside that program, and general changes in the field. Personal factors also play a very strong role in the discovery of a long-term theoretical orientation (Halbur & Halbur, 2019).

Research has shown that psychotherapy students show marked difficulty in finding their theoretical orientation (Finch et al., 1993; Hinkle et al., 2015). They discussed the all-too-common appeal from instructors to students to select an orientation early on to research. More research into the development of students in theories courses show that their opinions of themselves, clients, and psychotherapy change throughout that course (Hinkle et al., 2015),
showing that orientation selection and adherence to that choice in such a beginner stage is fraught with ongoing changes due to lack of information and experience.

Training and education have a major impact on students’ selection of a theoretical orientation. Hinkle et al. (2015) mentioned that “[t]here are also several other factors that assist students in their selection of an initial theoretical orientation[, including] the content of the course work assigned within individual training programs[,] required readings within courses[,] and [. . .] interpersonal attachments between students and their supervisors” (p. 255). Indeed, a program or supervisor’s own orientation can be a main factor in what the student’s initial orientation turns out to be (Halbur & Halbur, 2019).

The selection of an orientation can be influenced by the program type or school in which the student is studying psychotherapy. Due to the research nature of doctoral programs of study in psychology or psychotherapy, a positivist approach to research, and therefore therapy, can be seen (Chambers et al., 1993). This implies that programs of clinical psychology and counseling psychology requiring research and a dissertation trend more toward teaching behavioral approaches in psychotherapy; in effect, this might increase the chance that students will engage in a behavioral orientation in practice. The literature is not clear as to whether these students were predisposed to such an orientation based on personality or other factors or if it in fact was a causal relationship of the educational program.

Much of the research around selecting a theoretical orientation centers around internal factors of the helper or student, such as personality. Halbur and Halbur (2019) discussed this in their book on theoretical orientation choice for students and mentioned that their measurement tool, known as the Selective Theory Sorter—Revised (STS-R), could be used to that end. They also discussed the usefulness of the Miller Multiphasic Personality Inventory (MMPI) to the
same end. As the MMPI is an extended measurement tool of personality, other researchers have used different tools in their effort to match personality to theoretical orientation (Saarnio, 2011; Topolinski & Hertel, 2007; Tremblay et al., 1986).

Theoretical orientation education, selection, and developmental progression is still a sub-field of psychotherapy that requires much more research. The outcomes from extant research frequently disagree. Personality is a factor in theoretical orientation selection, but it is unclear as to what extent. As such, this research will employ a test that uses personality to help prospective trainees to select their orientation more intentionally.

**Eclecticism and Orientation Integration**

Psychotherapy originally started with psychoanalysis, which then prompted further thought and reaction from other professionals and researchers, increasing the methodological scope of the field to behaviorism, humanism, and beyond to sub-specialties, postmodern approaches, and integrative approaches. Before the 1930s, many theorists practiced, and were only interested in, their one theory or modality of psychotherapy. Study and research into integrating different theories started around the 1930s and continue today (Norcross & Beutler, 2014).

Integration is predicated upon the idea that one theory is not enough to explain the complex nature of human behavior. Indeed, many theories skip, or disagree with common knowledge about, the simpler aspects of human activity (Wampold, 2010). Integrating two (or more) theories together increases the ability of one theory to make up for the weaknesses of another, thereby increasing the comprehensive foundation of knowledge that the helper has to treat the client’s mental health concerns.
There are myriad ways to categorize different methods of orientation integration in psychotherapy. The main ones that the research describes are technical eclecticism, assimilative integration, and theoretical integration. Metatheories, common factors theories, and learning theories will not be covered in this section, as they are not integrative in their theory, but rather in their practice and application. This study mainly busies itself not with the application of theory, but with the orientation of the client and helper to therapy.

The first type of orientation integration is theoretical integration. This was the first type of integration that was created in the 1950s and articulated in a book by Dollard and Miller (1950). It described treatment outcomes for neurosis for clients whose helpers were using psychoanalysis and behaviorism concurrently. The authors described the difficulties of combining these two orientations: “perhaps because both psychoanalysis and behavior therapy retained their orthodoxies and were resistant to the notion of ‘combining’ forces” (Arkowitz, 1992; Stricker & Gold, 1996; Wampold, 2010).

While the example of psychoanalytic and behavior therapy theoretical integration was a failure, the general idea is sound. A better example of a successful theoretical integration might be existential psychotherapy and cognitive-behavior therapy. These therapies, while seemingly contradictory at first, when used together, can increase the efficacy of each and support and manage each other’s weaknesses. Existential psychotherapy provides the warmth, depth, and awe that a positivist therapy like cognitive-behavior therapy does not espouse, while cognitive-behavior therapy adds technique and structure that existential psychotherapy does not. It is possible for two therapies to complement each other, even when their foundational ideals contradict. Wachtel’s (1977) seminal work on integration discussed the basic requirements for theoretical integration between two distinct therapies.
The second type of orientation integration is technical eclecticism. This form of integration does not prioritize adherence to a central theory. In fact, a central theory is not necessarily needed. Lazarus and Beutler (1993) wrote the seminal work on the theory. In their paper, the authors describe technical eclecticism as “an effective program of counseling [that] can be based on a systematic process for selecting therapeutic procedures if this decision-making system is, itself, built on empirical demonstrations of the conditions, problems, and clients with whom different procedures are effective” (p. 383). Though technical eclecticism does not require a central theory, the disparate techniques used do need to be used in a way that is efficacious and rational (Lazarus & Beutler, 1993).

Followers of technical eclecticism have a change model that they follow, but, as mentioned, tend to use disparate techniques to define their practice. Instead of a helper following the tenets of Gestalt therapy, including the ideas of the Cycle of Experience (Cole & Reese, 2017), contact, and the adherence to the obvious (Wheeler & Axelsson, 2014), a helper might take the well-known technique called the empty chair and pair it with neo-Jungian analysis’s voice dialoguing and/or internal family systems’s parts work to help a client become more aware of his or her own internal parts and how to effectively communicate with them (Schwartz & Sweezy, 2019).

The third type of orientation integration is assimilative integration. Assimilative integration is a combination of the two previous integration styles. Assimilative integration assumes, similarly to theoretical integration, that base theories have weaknesses or holes that need to be filled with additional information. Instead of repairing that weakness with another full theory, assimilative integration repairs it with techniques, like technical eclecticism’s use of multiple techniques.
A helper might use assimilative integration when helping a child in a family setting. The helper’s main orientation to the problem and the solution might be a behavioral one, using schedules of reinforcement to increase helpful behaviors and actions and decrease unhelpful ones. The helper might bring in techniques from family systems theory to help them to coach the family in how to sustain such change and use interpersonal psychotherapy with the child to increase their feeling of support and connection with their family.

This study requires some knowledge of integration. The three-axis model assumes integration on the part of both helpers and clients, as single-family orientation approaches are much less common now than in the past. It is possible that a higher score on one of the axes signals a fuller adoption of the theory as an orientation, whereas a lower score might signal an adoption of some techniques only. This study assumes, as the research does, that integration is normal and acceptable in current psychotherapeutic practices (Wampold, 2010).

**Client-helper Matching**

The match between client and helper is an important topic in psychotherapy. Matching itself is frequently not defined in the literature; rather, a proxy is used, such as therapeutic alliance, to understand that matching itself means an increase in the similarity of base factors or characteristics in both the helper and client (Borelli et al., 2019), fueling an increase in therapeutic alliance (Wampold, 2001; Wampold & Imel, 2015).

The idea of client and helper matching is important to the therapeutic alliance in psychotherapy. Hubble et al. (1999) asserted that a strong therapeutic alliance accounts for roughly 30% of clients’ change in psychotherapy. Other sources (Gaston et al., 1991, 1998) have cited up to 57% of change in clients being accounted for by relationship factors in therapy.
Research into matching client and helper is on-going and seems to recur in increased interest around every 15 to 20 years, possibly in response to the introduction of new psychotherapeutic constructs. The perspective on matching seems to change with every generation of research. Matching client and helper has been tested for ethnicity and race, language use, emotional openness, values, religious views, worldview and ideology, gender, and sexual orientation. The correlation between matching on these demographic factors and therapeutic outcomes varies widely (Sterling et al., 2001; Frankel, 2004; Cabral & Smith, 2011; Borelli et al., 2019).

To best understand the outcomes of matching research, preference of the matching variable (e.g., ethnicity, race, worldview, gender, etc.) and correlation to change in therapeutic outcome are important constructs worth noting. The preference of matching variables means that the researcher measured whether the client found it helpful or preferrable to have a person of their same demographic type as their helper. This does not inherently mean that there was an impact on theoretical outcomes in the research. This construct is measured in outcome data, which can be measured based on symptom reduction, increase in insight or awareness about the problem, and/or change in the client’s general situation.

The construct named “values” in the research was primarily used from the mid-1980s through the early 1990s to attempt to match clients and helpers. Possibly due to the lack of “consistent typology by which values may be classified and sound” (Beutler & Bergan, 1991, p. 16), there are myriad difficulties discussed in the literature about values matching. Kelly and Strupp (1992) found that therapists’ perception of outcomes were positively correlated with perceived value congruence, though this did not extend to clients’ perceptions. Another study showed some favorable outcome increase correlated with value congruence, though only specific
circumstances seemed to yield these results (Arizmendi et al., 1985). As such, it seems that matching on values, possibly due to their abstract nature, does not clearly correlate with psychotherapeutic outcomes.

Like value-based research around matching, there is some research around matching between client and helper based on religious beliefs. Most of the research studies Christianity, specifically. In these studies, there was little to no correlation between religious match and therapeutic outcome (Salem & Hijazi, 2019). Due to the difference in technique and goals inherent between traditional counseling and Christian counseling, Worthington et al. (1988) urge readers to understand that “Christian counseling should not be treated as a unitary phenomenon” (p. 282).

The research behind the match between client and helper based on race or ethnicity and its effect on therapeutic outcomes is mixed at best. In his meta-analysis on the subject, Karlsson (2005) noted that different studies do not define things like race, ethnicity, therapeutic outcomes, and even therapy similarly, begetting a lack of similar outcomes in the research and decreasing the general effectiveness of understanding them. Multiple sources (Cabral & Smith, 2011; Flaskerud, 1990; Karlsson, 2005; Sterling et al., 2001) concluded that there is little to no correlation between similar or same race or ethnicity and outcome for the client. Cabral and Smith’s (2011) meta-analysis did discuss the increased preference of clients for their helper to be of the same race or ethnicity. However, their findings showed that this had no bearing on the outcomes of therapy for those individuals.

Matching on emotional congruence between client and helper is a small area of research inquiry. Some researchers included emotional congruence not in matching literature, but rather in “empathic accuracy” (Atzil-Slonim et al., 2019; Lazarus et al., 2019), which is then not
correlated with therapeutic outcomes. Unfortunately, the outcomes for the research measuring the relationship between emotional congruence and therapeutic outcomes is confusing at best and does not lead to distinct and clear outcomes that might be useable by the practicing helper (Atzil-Slonim et al., 2018). Specifically, there was a mix of results that did not allow for the operationalization of these findings and might have pushed some helpers to be less genuine so as to increase therapeutic outcomes. This could negatively impact the therapeutic alliance (Rogers, 1951). More research is needed on this front, as the researchers themselves suggest.

Newer research in matching client and helper use language as a way of potentially understanding therapeutic alliance and possibly boosting psychotherapeutic outcomes. Language style matching, defined as “the degree of similarity in rates of function words in dyadic interaction” (Doorn et al., 2020, p. 509) and “the degree to which unconscious aspects of an interactional partner’s language mimic that of the other partner” (Borelli et al., 2019, p. 9), is the term-specific proxy here. As this is a new area of research, little quantified work has been done on the subject. Doorn and Müller-Frommeyer (2020) suggested that it might be a viable source in future research for understanding underlying concepts in language that might influence the ongoing match between client and helper.

The research in understanding match types and identifying useful variables correlating with increased matches between client and helper are indeed manifold. To date, these matches do not significantly predict client outcomes in most of the primary literature and do not hold up to rigorous analysis. Frankel (2004) examined some other possible matching variables (e.g. personality type, empathy styles, epistemological styles, and attachment style), frequently with little or mixed viability. This research proposes that another variable might be better suited to
match client and helper that takes philosophical and applied factors into account, specifically theoretical orientation.

Outside of the counseling literature, there might be a parallel in client-helper match with teacher and student. Pittaway and Moss (2006) discussed the important in teacher education of increasing funds and resources toward understanding the goals of students and for teachers to orient themselves to them. While not a complete match to this study’s goal, the fundamental understanding that a closer orientation to goals between the teacher and student might lead to increased buy-in and outcomes in students is a parallel point.

**Matching Assessments**

Past research discusses not only the educational methods and processes of matching a psychotherapy student to a theoretical orientation (as discussed previously), but also more quantifiable methods in doing this; namely, matching assessments. Valid and reliable matching assessment are much rarer than their popular culture cousins and will be reviewed here, including the tool adapted for this research. Some researchers (e.g., Coan, 1979; Cocozzelli, 1987; Larson, 1980; Sundland & Baker, 1962) did mention other “assessments” that informed their choices of orientations to include in their assessments; but upon further research, these sources are not assessments. Rather, they are antiquated books or documents suggesting developmental pathways for specific helper groups (e.g., psychologists, social workers, counselors).

Aside from formally researched and validated orientation assessments, there are at least a few unvalidated, pop-psychology assessments that strive to help the budding helper to start their journey in a sound theory—for example, see “Finding Your Theoretical Fit” (Barakat et al., 2014) or “What’s Your ‘Natural’ Theoretical Orientation” (Flanagan, 2019). As they are
unvalidated, these tools will not be researched here. If these pop-alternatives are to be used, it should be in a controlled setting and as a way to start the conversation about the development of a prospective helper’s approach to counseling, in conjunction with conversation with a supervisor or advisor, rather than being the only source used to steer the student.

Given the nature of reliability and validity in the research around theoretical orientation matching tools, three tools were assessed as useful to add here. Basic tenets of psychometric evaluation and testing were used, including the judgment of psychometric validity procedures, as well as best practices in tool construction to evaluate these tools (Gehlbach, 2015; Boateng et al., 2018). They include the Theoretical Orientation Profile Scale—Revised (TOPS-R), the Theoretical Evaluation Self-Test (TEST), and the Selective Theory Sorter—Revised (STS-R).

The Theoretical Orientation Profile Scale—Revised (TOPS-R; Worthington & Dillon, 2003) is the oldest assessment that will be reviewed in this study. This scale is composed of 18 items and was evaluated by an exploratory factor analyses at six factors, including psychoanalytic/psychodynamic, cognitive-behavior, humanistic/existential, family systems, feminist, and multicultural. Dividing the number of items by the factors results in 3 items per factor. This test broke down each factor’s items specifically, inserting questions about “(a) theoretical identification—referring to the extent to which the respondent identifies with a particular theoretical school [. . .]; (b) conceptual orientation—referring to the extent to which the respondent conceptualizes cases from the perspective of a particular theoretical school [. . .]; and (c) methodological orientation—referring to the extent to which the respondent uses methods associated with that particular theoretical school” (Worthington & Dillon, 2003, p. 98).

The TOPS-R was measured in the above psychometric study using internal consistency for reliability and criterion-related and construct tests for validity. The internal consistency for
the six factors in the test proved to be high ($\alpha = .96, .95, .95, .95, .95, \text{ and } .94$) for psychoanalytic/psychodynamic, cognitive-behavior, humanistic/existential, family systems, feminist, and multicultural factors, respectively. These findings continued in ongoing sub-studies in the overall validation study. The criterion-related validity of this scale was measured through a pared-down factor group of three: psychoanalytic/psychodynamic, cognitive-behavior, and eclectic, each with strong classification rates (83.7%, 87.4%, and 62.8%, respectively). Evidence for construct validity was mixed, as some constructs were validated, and others were not. Specifically, the family systems subscale showed no significant correlations, while myriad other subscales showed both positive and negative correlations with subscales from other measures.

The Theoretical Evaluation Self-Test (TEST) is a theoretical orientation matching tool developed by Coleman (2004). The test was originally 56 items and was condensed to 36 items after pilot studies suggested the deletion of certain items, then decreased to its final length of 30 corresponding with the change in categorization. The first version of the assessment categorized helpers into orientations including psychodynamic, biological, family therapy, ecosystems-cultural, cognitive-behavior, pragmatic, and humanistic theories or groups. Later, the assessment decreased the number of groups to psychodynamic, biological, family therapy, ecosystems/cultural, and cognitive-behavioral. The final number of groups decreased to four, based on needed simplification in the assessment and factor analysis, including behavioral health, psychodynamic, ecocultural, and family therapy. On Coleman’s interactive website, he includes seven categories: psychodynamic, biological, family therapy, ecosystems, cognitive, pragmatic, and humanistic.

The TEST was subject to preliminary validation measures, without follow-up measures during later versions. Convergent validity was possible due to the test taking items from previous
scales (see Cocozelli’s scale in Social Workers’ Theoretical Orientations (1987) and Larson’s “Therapeutic schools, styles and schoolism: A national survey” (1980)) with an average correlation of $r = .45$ ($p < .0001$). The study used multiple correlations in five areas, including psychodynamic, family, ecosystems-cultural, cognitive-behavioral, and humanistic. All five showed moderate to strong correlations. Known-groups validity were also tested for, using ANOVA, finding that there were statistically significant differences between all groups except for the group designated “humanistic.” Coleman compared only the psychodynamic and humanistic orientations, as they had enough data to run an ANOVA about these two orientations only. He compared each to the cognitive subscale and to each other to find statistically significant results. Later research explores the factor validity of the later version of the assessment, leading to the decreased factor grouping. Due to continued concerns in validating the humanistic and pragmatic sub-scales, these groups were integrated with other viable items into a new group called “behavioral health” (Cohen, 2007). All other groups showed significant factor validity.

The final orientation matching tool is the Selective Theory Sorter—Revised (STS-R). It was created by Halbur and colleagues as the Selective Theory Sorter (STS) and further evaluated to find its psychometric properties (Johnson & Halbur, 2013). The STS-R is the product of that process. This assessment can be found in its entirety in Halbur and Halbur’s (2019) book Developing Your Theoretical Orientation in Counseling and Psychotherapy. It is used as an integral part of the book and is to be used in conjunction with the rest of the guidance given in that text.

This tool has the most items and categories of the previous assessments. The revised sorter has 60 items encompassing 12 schools of theoretical orientation. This means that that each
orientation has five questions allotted to it. The STS-R’s response option anchors are situated on a scale of “not at all like me” with a value of -3 to “a lot like me” with a value of +3. No other anchors are present on the response options, other than “neutral,” valued at 0. Taken together, all orientation subscales can be valued anywhere between -15 and 15. The results of this tool rank orientations based on these numbers and proceed to prioritize the top three as those that should be studied by the participant.

Validation of the STS-R occurred in an incomplete manner. The original STS was validated as reliable over time, specifically in the integrative, psychoanalytic, and transactional analysis orientation subscales. Unfortunately, two out of these three examples (integrative and transactional analysis) are no longer used in the revised edition. There is some implication in the text by Halbur and Halbur (2019) described above that there has been some more psychometric validation, but I could not find formal reference to this and my correspondence with one of the authors also failed in procuring such information.

The usefulness of past theoretical orientation matching scales is subject to some amount of scrutiny. None of the psychometric evaluations of these tools are either comprehensively secure in their analyses nor necessarily complete. Basic tenets of psychometric tool creation would require a bipolar Likert-type answering scale to have seven anchors (Boateng et al., 2018). This was frequently not the case in the examples. The analyzed tests also did not wholly stand up to psychometric evaluation, showing only that some items held up to scrutiny, rather than most or all. The frequent use of “integrative” or “eclectic” in some of these scales is also concerning, as these assessments are made for a student or helper developmental level where specific orientation suggestions would be much more helpful than aggregate or generic groups. Furthermore, the use of such groupings might have lead subjects away from specific orientations.
Running head: 3D ORIENTATION MATCHING MODEL PREDICTION

It is known that eclecticism and integrative practice are growing in popularity and the analyses of these articles show that these groups get most of the sample, increasing viability of those groups, rather than the distinct and specific groups, such as psychodynamics, behaviorism, or humanism/existentialism. Last, the lack of items and number of items for each orientation in the scales brings forth serious doubt as to the real usefulness of those scales.

**Time**

Time is an important concept in psychotherapy. A review of the literature about time is necessary to explain the need of the third research question in this study. The literature around whether time is a factor in therapeutic outcomes is mixed and subtly nuanced.

The definition for time in therapy changes by study. Some described time as the general amount of time in therapy with the helper (Gingerich & Eisengart, 2000; Johnson & Gelso, 1981), while others counted the number of sessions (Knekt et al, 2016). This is significant, as it is possible that a client’s therapy spans a longer time but has the same amount of sessions as a short-term therapy.

Wampold (2015) discussed the general effectiveness of therapy over different theoretical orientations. His research produced the conclusion that type of therapy does not matter. Importantly, different types of therapy require different amounts of time to be successful. This research hypothesizes that time spent in counseling is a significant factor that might impact the relationship between therapeutic outcomes and orientation congruence.

Other research shines a light on orientations that are used in brief periods of time, including cognitive-behavior therapy and solution-focused brief therapy. Both are considered short-term, positive-focused therapies today (Beck, 2011; Gingerich & Eisengart, 2000). Johnson and Gelso (1981) discussed these therapies’ increased popularity in recent years as a symptom of
the need for more immediate care, given overflowing waitlists and the slow decrease of stigma against therapy. Brief therapies also increased in popularity due to managed care and insurance companies’ interest in keeping costs low (Shapiro et al., 2003). Indeed, research exists to suggest that brief therapies indeed are cost-effective, though not in comparison to other forms of therapy (Hakkaart-van Roijen et al., 2006).

Inversely, long-term therapy also shows great efficacy. Knekt et al. (2016) discussed the long-term effects of short-term and long-term therapies. They found that long-term therapies “showed greater reductions in symptoms, greater improvement in work ability and higher remission rates” (Knekt et al., 2016, p. 1). Ten years after the final follow-up, the authors checked in and again the long-term therapy showed more significant benefits over shorter-term therapies, though the difference between the reduction in symptoms between the two forms of therapy was less (Knekt et al., 2016).

Due to the lack of consistent outcomes in respect to time’s relationship with therapeutic outcome, it is important for this study to account for its role. This study will control for time (i.e., number of years the helper has been in practice, number of years the client has been in therapy overall, and number of completed dyadic psychotherapy sessions), where applicable, ensuring that time is not confounding the study. This study will also specifically target time as a possible moderator between orientation congruence and therapeutic outcomes.

Theoretical Framework

Originally, this research was designed to better understand academically the general relationships between the variables discussed. Ongoing research continued to hint at a few general difficulties in the field: Why has matching clients and helpers been ineffective? What
methods have been attempted? Why has there been no helpful answer or ongoing research in this area?

Research into the Intentional Theory Selection Model (ITS; Halbur & Halbur, 2011) gives some grounding to this research. Halbur and Halbur (2011) used the ITS as a foundation off of which to ask important questions around theoretical orientation selection and construction. This model breaks down orientation selection into multiple steps, allowing for prospective helpers to gain insight into this choice natively and to look to mentors and advisors to help.

The first step of the ITS model is called *Life Philosophy*. According to this step, prospective helpers must understand their own worldview and cultural competencies. Such ideas are part of the CACREP model (2015) of counselor education, being discussed in classes having to do with multicultural competence and ethics. This step is the bedrock on which the rest of the inquiry may be built.

The second step of the ITS model is called *Schools of Thought*. This steps entails prospective helpers using their understand of themselves gleaned from the first step to review six schools of thought, including a) psychodynamic, b) behavioral, c) humanistic, d) pragmatic, e) constructivist, and f) family approaches. The result of this step is to match prospective helpers’ understandings of themselves to a school of thought, allowing them to progress to the next step of the model.

The third step of the ITS model is a furtherance of step two, pushing prospective helpers to understand their relationship to specific theories in their chosen school of thought. Each school of thought is comprised of multiple theories (e.g., the psychodynamic school of thought includes psychoanalysis, Lacanian psychoanalysis, Dasein psychoanalysis, self-psychology, object-relations theory, etc.) and at least one should be chosen for further study.
The fourth and final step of the ITS model continues to understand theories based on goals and interventions of that theory. Halbur and Halbur (2011) remind prospective helpers that their life philosophies should continue to match goals and interventions in their theory, ensuring that there is a match between theory and helper on implicit values in psychotherapy.

This model is an implicit part of this study. The ITS model points to the importance of theoretical orientation meeting prospective helpers’ innate assumptions about life, philosophy, and treatment. This study uses a variant of Halbur and Halbur’s Selective Theory Sorter—Revised (STS-R), which is an application of the ITS model. Theoretical orientation selection by way of the STS-R and influenced by the ITS model could be a factor in the greater understanding of matching between client and helper.

This study uses the STS-R and the ITS model to inform further research about matching. The STS-R is used with clients and helpers to produce data that could find a better way to match client and helper. Clients’ orientation is found by continuing to respect the idea that clients’ life philosophies are the bedrock off which orientation might be built.
Chapter 3: Methodology

Overview of Study

This study was a quantitative inquiry into the match between client and helper. The goal was to have around 32 dyads take assessments specific to their role. Descriptive and inferential statistical tests were employed to investigate the relationship between orientation congruence and therapeutic outcomes.

Sequence of Steps for Developing Study

There was a specific method to create and develop this study. First, assessments were evaluated and adapted. The sample was then secured, and the assessments were given. Finally, after survey data were collected, the statistical analyses were conducted, and results were tabulated.

The Assessments

This study used multiple assessments to answer its research questions. Specifically, this study employed altered versions of Halbur and Halbur’s (2011, 2019) Selective Theory Sorter—Revised (STS-R) and the original Outcome Rating Scale (ORS; Campbell & Hemsley, 2009). These assessments were revised to increase their utility and to prepare them for statistical analysis.

The Selective Theory Sorter—Revised, Shortened (STS-RS). The original STS-R was composed of 60 questions, each having to do with a theoretical orientation. The assessment tool’s output was tabulated and organized under headings of 12 specific theoretical orientations. These orientations included psychoanalytic theory, analytic psychology, individual psychology, person-centered therapy, Gestalt therapy, constructivist school of thought, behavioral school of thought, rational emotive behavioral therapy, reality therapy, cognitive behavioral therapy,
family approaches school of thought, and existential therapy (Halbur & Halbur, 2019). Every orientation was allotted five questions. Each question required an answer based on a seven-anchor Likert-type scale from *Not At All Like Me* (-3) to *Neutral* (0) to *A Lot Like Me* (3) (Halbur & Halbur, 2019). No other anchor was given a designation. This bipolar scale allowed for each theoretical orientation subscale to result in a range of scores from -15 to 15.

Multiple changes were made to the STS-R to ensure practical and statistical viability. First, the specific questions were piloted and revised. The STS-R was evaluated by a pilot group of ten doctoral-level counselors of various backgrounds, ages, ethnicities, and socio-economic levels. This group agreed that many questions were unclear and opted to delete them. The assessments were altered to ensure that they consisted of the same number of questions for each sub-group (e.g., psychodynamics, behavior, and humanism/existentialism). Please see Appendix B for the changed assessments. The second pilot group consisted of multiple established professionals in the field, who helped to establish face validity.

Second, it was determined that the number of survey questions on the adapted version of the STS-R—henceforth referred to as the Selective Theory Sorter – Revised, Shortened (STS-RS)—was greater than the maximum number of questions that result in quality answers from respondents (Chudoba, n.d.). The maximum number of questions decreased from 60 to 30. The survey was further changed to decrease the items from 30 to 15, as this was deemed appropriate to decrease participant fatigue (Hinkin, 1998).

Third, the number of orientations was changed. The original STS-R comprised 12 orientations. With the change in number of questions to 30, this would allow for roughly two-and-a-half questions per orientation. This was determined as too few data points (How many data points are enough?, 2013). This study does not use specific orientations, but rather uses
orientation traditions or families to categorize orientations into three groups: a) psychodynamics, b) behaviorism, and c) humanism. Three orientation traditions increased the number of specific orientation questions per orientation to five, allowing for increased information per orientation tradition.

Finally, the scale anchors were changed. In the new assessment tools, the scale was no longer bipolar, and the anchors decreased from seven to five (Boateng et al., 2018). The selection of answers by respondents was changed from writing in a number to marking the printed anchor number. The new anchors are not at all (0), a little (1), somewhat (2), very (3), and extremely (4). Their numerical designations during tabulation are 0, 1, 2, 3, and 4, respectively. Below are example questions for the psychodynamic, behavior, and humanistic orientation families:

Psychodynamic: “Coming to grips with the unconscious part of the personality is the only way to truly achieve individuation.”

Behavior: “Human problems stem not from external events or situations but from people’s views or beliefs about them.”

Humanistic: “Personality is constructed through the attribution of meaning.”

The iterative and recursive process of altering the original STS-R using the aforementioned focus groups yielded results that are noteworthy to report. The STS-R originally offered the opportunity for its participants to be matched with any of 12 orientations. The STS-RS (this study’s adapted version of the STS-R) produced only nine of those orientations. The three that were not shown in the STS-R include “constructivist school of thought,” “reality therapy,” and “family theories school of thought” (Halbur & Halbur, 2015, p. 35). While a reason is not immediately evident, it is possible that these schools of psychotherapeutic thought do not fit with this study. For example, family theories school of thought is not a dyadic psychotherapy, which is a mismatch to this dyad-based study, and both the constructivist school
of thought and reality therapy could be described as integrative—meaning that their roots come from multiple psychotherapeutic theories.

The specific orientations and their prevalence in the final draft of the STS-RS might support the idea of eclecticism being abhorred by the focus groups, given the objective of understanding families of orientations. The psychodynamic family of orientations in the STS-RS included psychoanalysis, analytic psychology (also known as Jungian analysis), and individual psychology (also known as Adlerian psychotherapy). The humanism family of orientations in the STS-RS included existential psychotherapy, Gestalt psychotherapy, and person-centered therapy (also known as client-centered therapy or Rogerian psychotherapy). Each family was allotted five questions. The psychodynamic family questions resulted in one fewer question allotted to individual psychology and the humanism family questions resulted in one fewer question allotted to Gestalt psychotherapy. Arguably, these two therapies are rather integrative or eclectic. Individual psychology, while under the umbrella of psychodynamics, was pioneered by Alfred Adler, who was somewhat against the main tenets of psychoanalysis and other psychodynamic therapies of the time (Abramson, 2016; Colby, 1951). Fritz and Laura Perls made the switch from psychoanalysis to a much different and more humanistic psychotherapy, which today is called Gestalt psychotherapy (Perls et al., 1951). It must also be mentioned that modern Gestalt psychotherapy, as it is found in the time of the STS-R and its creation (around 2015), is much more humanistic, feelings-oriented, and explorative than Fritz Perls’s interpretation in the earlier part of the 20\textsuperscript{th} century (Wheeler & Axelsson, 2015).

**The Assessment of Intrinsic Client Orientation (AICO).** The Assessment of Intrinsic Client Orientation (AICO) was a new assessment created for this study. It was developed to measure client intrinsic orientation as a direct and measurable parallel to helper theoretical
orientation, as measured in this study by the STS-RS. This assessment was designed to mirror the STS-RS in structure and results.

The AICO had a similar structure to the STS-RS and a similar process was used to create it. First, the questions from the STS-RS were piloted and revised. The same pilot group of ten doctoral students reviewed the questions and made vocabulary changes, decreasing jargon and increasing the likelihood that clients will fully understand the survey questions. All questions included on the STS-RS are the same ones as those on the AICO, though, the language has been simplified. A second pilot group of laypeople were tasked with further revising and editing the questions. This facilitated decreased question comprehension error. Like the STS-RS, established professionals in the field of counseling and psychology reviewed the questions and established face validity.

Below are the examples of AICO questions for each orientation family. These questions are the same as the STS-RS questions above, but have been transformed with the help of a pilot group (described above) to ensure understanding by prospective clients.

Psychodynamic: “Understanding our innate and underlying personality traits is the only way to truly grow and thrive.” (Note: The focus group recommended the deletion of the terms unconscious and individuation. It then recommended the substitutions for those terms.)

Behavior: “Human problems stem not from external events or situations but from people’s views or beliefs about those events or situations.” (Note: The focus group recommended minimal edits here. They only recommended that the question end with more specificity, requiring “those events or situations” to be added.)
Humanism: “A person’s personality develops based on the meaning they make of themselves, their environment, and their interactions with others.” (Note: The focus group recommended some softening of the language and the addition of examples for meaning-making.)

The Outcome Rating Scale (ORS). The Outcome Rating Scale (ORS) is not proprietary to this study and is used widely in research and clinical outcome measurement. The ORS is a brief measure that is easy to employ and whose psychometric properties are reliable and valid (Campbell & Hemsley, 2009; Miller et al., 2003). During psychometric testing, Cronbach’s alphas ranged from $\alpha = .87$ at the first retest to $\alpha = .96$ at the second retest (Miller et al., 2003). Concurrent validity, as compared with the Outcome Questionnaire 45.2 (OQ45.2), showed a correlation of $r = .59$. This was noted as a “moderate indication of concurrent validity” (Miller et al., 2009, p. 96), with an added note that the ORS is shorter than the OQ45.2, so the strength of correlation between the two should be expected to be reduced. Given the nature of the other surveys, it was deemed appropriate to employ a brief measure to discourage participant burnout.

This ORS is a four-question tool, normally used to measure clients’ experiences of therapeutic outcomes. Specifically, the ORS measures outcomes based on four dimensions: a) individual (personal wellbeing; i.e., “How much better are you feeling about your personal wellbeing due to therapy?”), b) interpersonal (family, close relationships; i.e., “How much better are you feeling about your family and close relationships due to therapy?”), c) social (work, school, friendships; i.e., “How much better are you feeling about your work, school, and friendship relationships due to therapy?”), and d) overall (general sense of wellbeing; i.e., “How much better are you feeling about overall (general sense of well-being) due to therapy?”). The full ORS was used due to its ease in adoption, brevity, and clarity.
The scale and anchor of the ORS were changed to mirror those of the other measures in this study. The scale for the ORS was altered from an infinite-anchored continuum to a unipolar, five-anchored system, as seen in the STS-RS and the AICO. Such an anchor system was in concordance with survey construction guidelines and will allow for better descriptions of anchors (Vagias, 2006). The new anchors were not at all (0), a little (1), somewhat (2), very (3), and extremely (4).

The Sample

The second step of the study was to develop a pool of dyads made up of existing clients and helpers. An a priori method of creating dyads was not used here, due to time and feasibility constraints. As such, a post-hoc method was used to take advantage of pre-existing helping relationships. A mixture of convenience and purposive sampling for the helpers and chain-referral sampling was used for the clients.

Participant Helpers. This study required 123 dyads for its sample. A combination of convenience sampling, purposive sampling, and chain-referral sampling was used to find 123 helpers. This combination was deemed appropriate, as convenience sampling would help yield the numbers required to power this study and purposive sampling would allow for all three helper theoretical orientation families exist in the study.

To secure this type of sample, multiple avenues of communication were used in accordance with convenience sampling. Multiple private practice Facebook groups were used to contact colleagues in and out of the Pittsburgh area and asking those colleagues to continue to ask co-workers who might be interested in participating in this study. Counselor education and counseling listservs, namely CESNET and CounselingGrads, were also used to this same end.
Myriad private groups in the Pittsburgh area were petitioned through email and their members asked to participate. These groups mirror orientations consistent with this study’s goals, an example of purposive sampling in this study. Specifically, the Pittsburgh Psychoanalytic Center, the Cognitive Behavioral Institute, and the Gestalt Institute of Pittsburgh were all asked to participate in the study. The heads of the organizations were asked to forward the request to their members and others to complete the STS-RS.

The first method of chain-referral sampling was implemented at this stage in the sampling procedure. The private groups were asked to petition other such programs to complete the dyad requirements. This allowed for the power of the statistical analysis to be met and for a geographically broader sample to exist.

**Participant Clients.** Clients were identified through their contact with their helper. Chain-referral sampling was used to find clients to complete the 123 dyads needed for this study. Helpers were asked to identify one possible client and extend the invitation for this study. Helpers were given an individualized code that their client would enter on the AICO, identifying the helper-client dyad. This researcher monitored the referral chains, emailing helpers to encourage their client to participate.

This method of chain-referral sampling met the criteria of Penrod et al.’s (2003) chain-referral sampling strategy, designed to “assist [...] researchers to reduce sampling bias, maintain confidentiality, and increase the validity of research findings when studying sensitive topics or hard-to-reach populations.”

**Statistical Analysis**

The data took the form of data sets produced from the STS-RS, AICO and ORS, as well as demographic characteristics and questions about client length of time in therapy. For this
study, three variables were analyzed: the relationship between client and helper orientation, therapeutic outcomes, and time factors in therapy. Multiple statistical analyses were conducted respective to the requirements of the research questions, as outlined below.

**The Data**

The relationship between client and helper orientation is dependent on two sets of information: the helper’s score from the STS-RS and the client’s score from the AICO. There is a natural connection between these two pieces of information; namely, the client and helper are engaged in therapy together already. This study requires a dyadic data set, meaning one datum per dyad. This requires a conceptual and mathematical explanation.

Both assessment tools (STS-RS and AICO) measured the adherence of helper and client, respectively, to the first three forces (or movements) in psychotherapy, including psychodynamics, behaviorism, and humanism. Each of these titles encompasses myriad sub-categories: psychodynamics includes psychoanalysis, object-relations theory, and self-psychology, among others; behaviorism includes behavior scheduling, cognitive-behaviorism, and reality therapy, among others; and humanism include client-centered therapy, Gestalt therapy, and existential psychotherapy, among others.

The assessment tools functioned as measurements of theoretical orientation for each member of the dyad. Each theoretical orientation continuum spans a range of zero to 25. To create one data point from three different continua, each continuum acted as one axis of three located on a three-dimensional plane. The psychodynamic continuum can be thought of as existing on the x-axis, the behavioral continuum on the y-axis, and the humanistic continuum on the z-axis. Corresponding data is derived from the other member of the dyad, creating two data points on one three-dimensional plane. A formula (see below)
$$d(p, q) = \sqrt{(p_1 - q_1)^2 + (p_2 - q_2)^2 + (p_3 - q_3)^2}$$

is used to measure the distance in a three-dimensional system between two data points (Danielsson, 1980; Estrada, 2011), resulting in one variable that measures the difference between helper theoretical orientation and client intrinsic orientation for each helper-client dyad. In this equation, $d$ stands for distance between $p$ and $q$, the coordinate data points for client and helper orientation data, respectively.

The possible moderating effect of time was considered through items on the AICO and STS-RS. Helpers were asked to provide the amount of time in years of experience they have been practicing. Clients were asked to provide the length of time they have been in therapy overall and helpers were asked to indicate the number of sessions they engaged in with the client.

The data for this study included multiple variables and types of data. Data were categorized into nominal, ordinal, and ratio types. Nominal data included identification information about the helper and client, gender, race or ethnicity, type of helping professional, theoretical orientation, and stage of client development. Ordinal data for this study included helper orientation influence factors, helper personal effectiveness rating, helper personal effectiveness rating, ORS data, helper theoretical orientation data, and client intrinsic orientation data. Ratio data for this study included age, number of years of the helper practicing post-master’s or terminal degree, client length of time in therapy, and number of sessions completed in this dyad.

**Data Screening and Preparation**

The data were screened to ensure viability for the statistical analysis. Data were analyzed to check for missing data, outliers, normality, linearity, and homoscedasticity.
Missing data were identified through two means. First, a visual walkthrough of the data was conducted, noting any missing fields. Second, Mahalanobis distance was calculated, and the new data were checked for outlier values.

To find normality, this study used SPSS to find values of skewness and kurtosis, ensuring they are both between -1 and 1. Histograms and Q-Q plots were also used to visually ensure normality. [The former showed data that adhered to a normal curve format and the latter showed data plots close to the line.] Finally, the Kolmogorov-Smirnov test of normality was used to check whether the hypothesis of normality was rejected.

Linearity was tested using a scatterplot matrix. The resulting data were checked for elliptical shapes. Homoscedasticity was checked using a MANOVA test. The resulting data were checked for a $p$ value of 0.01.

**The Research Questions and Corresponding Analyses**

This study required four groups of statistical analyses to be completed. The first was an exploratory factor analysis of the orientation data, to confirm whether the three orientations validly cluster into factors. The next three analyses corresponded with the study’s three research questions.

**Factor Analysis.** A factor analysis was required to check the factor groups of the independent variables, client and helper orientation families. This study used the idea of “families” of theories to organize theories together. Originally, the STS-R yielded one of a possible 12 helper theoretical orientations. The STS-RS (the shortened version of the STS-R used for this study) instead yielded data that allows for an organization of helper data into specific families of orientations, namely psychodynamics, behaviorism, and humanism. The
AICO yielded a similar output, though the subject of the data is clients, and the questions are similar in subject and dissimilar in vocabulary.

A factor analysis was run using the SPSS software. Output was analyzed through the analysis of four determinants: a) eigenvalues, b) variance, c) scree plots, and d) residuals. If the analysis resulted in eigenvalues greater than one, components were retained. Components that accounted for at least 70% total variability were retained. Scree plots were used to retain components before the leveling off of the eigenvalues. Finally, components were kept if only a few residuals exceeded 0.05 (Mertler & Reinhart, 2017).

**First Research Question.** The first research question asks: Do clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time?

This question was designed to find results and check them against the relevant literature around therapeutic outcome. The research hypothesis was that the helper-side data would match research in the Contextual Model (Wampold, 2015) that shows similar outcomes across helper theoretical orientations to therapy. The research hypothesis for client-side data was similar, in that clients’ outcome data would be similar across clients’ intrinsic orientations.

A multiple multivariate regression was run, with each helper and client therapeutic orientation family (psychodynamic, behaviorism, and humanistic/existentialism) as independent variables and therapeutic outcomes (specifically the personal wellbeing, interpersonal, social, and overall sub-scales of the ORS, respectively) as the dependent variables. The statistical program SPSS was used. After the analysis, tolerance was interpreted and, if tolerance was greater than .1 for any independent variable, data from the model summary, ANOVA summary table, and coefficients table were interpreted (Mertler & Reinhart, 2017).


**Second Research Question.** The second research question asks: Does degree of match between clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? This question attempted to understand how changes in orientation between client and helper might relate to both therapeutic outcomes in that dyad. These outcomes were assessed by both the helper and the client about the client’s progress. The research hypothesis was that as the distance between client and helper orientation decreases, therapeutic outcome would increase.

To answer this question, a multivariate regression was run, where the independent variable was orientation agreement between client and helper and the dependent variables have to do with therapeutic outcome. The dependent variable was split into the individual outcome results of the ORS (e.g., individual, interpersonal, social, and overall) for client and helper. This was determined as appropriate, as different types of therapy could correlate with different types of outcomes, rather than overall outcome. The independent variable was orientation congruence, as calculated by measuring the distance between helper and client orientation data. The statistical program SPSS was used. After the analysis, tolerance was interpreted and, if tolerance was greater than .1 for any independent variable, data from the model summary, ANOVA summary table, and coefficients table were interpreted (Mertler & Reinhart, 2017). As suggested by Stevens (2001), correlations among dependent variables in the analysis are ignored.

**Third Research Question.** The third research question asks: What is the moderating effect of time on the relationship between therapeutic outcome and orientation agreement? Time was split into its multiple variables, including therapist experience time, client’s time in therapy during their lifetime, and number of completed dyadic sessions.
The research hypothesis was that time has a moderating effect on the relationship between therapeutic outcome and orientation agreement. As time increases in therapy (including all time variables), it was believed that clients learn their helpers’ orientation and engage it congruently, gaining positive effects of the specific therapy.

To test out this hypothesis, the PROCESS moderation macro was used. The PROCESS macro is a bootstrapping tool that can be used by multiple statistical software programs, including SPSS, R, and SAS. This program was developed by Hayes (2013) and is used “to examine the effect of one or more mediating or moderating variables on the relationship between the independent and dependent variables [. . .] The program computed the direct, indirect, and total effects of X on Y as well as unstandardized and standardized regression coefficients, standard errors, and other statistics include \( t \) and \( p \) values and \( R^2 \)” (Abu-Bader & Jones, 2021, p. 48). Moreover, this method helped to keep statistical power high and decreases type 1 error risk (Hayes, 2009; 2013).

The PROCESS macro was run three times, once for each time variable as prospective moderator. In this study, the moderating time variables included time amount of helper experience, time amount of client in therapy in their lifetime, and number of successful sessions between the client and helper.

**Human Participants and Ethics Precautions**

Human participants were part of this research. The specialized nature of the variables in this research disallowed the use of any pre-existing data sets. Participants included pre-existing dyads composed of helpers and their clients. Identification data were not needed from clients or helpers, though an email address was requested to facilitate the randomized awarding of incentives for both groups.
This study used only adults as subjects. Both clients and helpers had an established therapeutic relationship with one another before this study. HIPAA was not violated, as helpers are not volunteering clients’ information and are instead giving the option to clients to engage this study of their own volition. No client identification information was requested, though as noted previously an email address could be volunteered by the clients to be given an opportunity to receive research incentives.

Counseling and private practice listservs and boards were used. There were no recruiters to find helpers for this study. Helpers acted as recruiters for their clients and were given strict instructions on how to choose clients who can help in the study. The helpers were given instructions for their clients about how to engage in the study, including a code that corresponds specifically to their dyad. The only material for this study that was needed was for the helper and one of his/her clients to complete an online survey hosted through the secure, password-protected survey software Qualtrics.

The information bundle in the survey tool described the research study to the participants before they assent to participating in the study. Consent to participate in the study took place when the participant clicks “I Agree” at the beginning of the online survey. The information bundle also included all necessary information around risks, benefits, and remunerations for the study. It also included information on withdrawing from the study.

All data were kept confidential to ensure that the rights of the participants were observed. To match client and helper into dyads, a matching code was needed that was provided to the helper and then input by the client. This code was used to denote the dyad matching data in the study. Data were kept on an encrypted hard drive.
All participants had the option to engage in the study. With the survey, there were instructions about participants’ rights to complete the study and the possibility of earning a monetary prize through random selection at the end of sampling. It was very clear that there was no obligation on the part of any party to complete the survey tool, and that withdrawal at any time from the study would be acceptable and that there would be no reprisal for such action. Data will be destroyed after ten years. Email addresses were requested from clients and helpers at the end of the study to add them into a randomized prize raffle. There was no requirement for any participants to input their email address information.
Chapter 4: Results

This study intended to understand the predictive relationship between therapeutic outcomes and theoretical orientation similarities between helpers and clients with time as a possible moderating variable. As the below results show, there was no significant predictive relationship between these variables. The possibility of limiting factors due to sample size will be discussed more in the next chapter.

A power analysis using G*Power software was run to find the appropriate sample size, given these parameters: a) statistical test = linear multiple regression: fixed model, \( R^2 \) deviation from zero; b) effect size = 0.31; c) power = 0.80, d) number of predictors = 6. The resultant sample needed for this study was \( N = 32 \). This study achieved a sample size of \( N = 30 \). Data collection was ended after around two months of intensive recruitment.

Four statistical analyses were conducted in this study. The first was an exploratory factor analysis, designed to determine grouping of the orientation variables. The second, third, and fourth analyses were variations on regression analyses that corresponded to the study’s research questions.

The first research question for this study was: Do clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? To test this question, a multivariate multiple regression was run involving helper and client therapeutic orientation families as independent variables and four therapeutic outcome variables (e.g., personal, interpersonal, social, and general wellbeing) as dependent variables.

The second research question was: Does degree of match between clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients'
therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time? The necessary statistical analysis for this was a multiple regression, including a Euclidian-calculated metric of distance between client and helper theoretical orientations as the independent variable and the same four outcome variables as the first research question.

The study’s third research question was: What is the moderating effect of time on the relationship between helper and client therapeutic orientation match and client therapeutic outcomes? A PROCESS macro for the statistical software SPSS was employed, including an aggregated time variable, created from three standardized time variables, including number of sessions between client and helper, amount of time client has been in therapy, and number of years of clinical experience of the helper.

All data were screened, prepared, and tested for statistical analysis. When the data were screened, no outliers were present in the final data. Two outliers were found in two of the original time variables—client time spent in therapy and helper number of years practicing post-degree—and were omitted. The used variable for time, avgztime, is a z-score-created variable and sensitive to outliers. No transformations were needed, as all data were determined to meet requirements of normality, linearity, and homoscedasticity.

**Factor Analysis**

Factor analysis with Statistical Package for the Social Sciences (SPSS) was conducted to determine what, if any, underlying structures exist for measures on six variables (psychodynamic helper orientation factors [p\_help]; behavioral helper orientation factors [b\_help]; humanistic helper orientation factors [h\_help]; psychodynamic client orientation factors [p\_client]; behavioral client orientation factors [b\_client]; and humanistic client orientation factors [h\_client]). Data screening led to no elimination of cases, nor any transformations, as normality, linearity, and
Bartlett’s test of sphericity results were $X^2(15) = 21.145, p = .132$. The Kaiser-Meyer-Olkin measure of sampling adequacy was .487. Neither Bartlett’s test of sphericity, nor the Kaiser-Meyer-Olkin measure of sampling was adequate in measuring redundancy in the independent variables nor the overlap in partial correlation in variables required for a factor analysis to function properly, respectively. These tests were most likely influenced by the low sample size. Principal components analysis was conducted utilizing a varimax rotation. The analysis produced a three-component solution, which was evaluated with the following criteria: eigenvalue, variance, scree plot, and residuals. The results did not match a logical grouping nor the original grouping of the assessment tool, as this statistical analysis was meant to test for construct validity.

After rotation, the first component accounted for 30.71% of the total variance in the original variables, the second component accounted for 22.77%, and the third for 17.44%. Component 1 consisted of three of the six variables: $b_{client}$, $h_{client}$, and $h_{help}$. These variables had positive loadings. Component 2 consisted of two of the six variables: $b_{help}$ and $p_{help}$ and had positive loadings. Component 3 consisted of one of the six variables, namely $p_{client}$ and had positive loadings.

**Test 1: Multivariate Multiple Regression**

Multivariate multiple regression with SPSS was conducted to determine the accuracy of the independent variables (psychodynamic helper orientation factors [$p_{help}$]; behavioral helper orientation factors [$b_{help}$]; humanistic helper orientation factors [$h_{help}$]; psychodynamic client orientation factors [$p_{client}$]; behavioral client orientation factors [$b_{client}$]; and humanistic client orientation factors [$h_{client}$]) predicting four therapeutic outcome well-being variables (personal [$outPWB$]; interpersonal [$outfam$]; social [$outwsf$]; and general [$outall$]). Data screening led to no
elimination of cases. No transformations were needed based on successful evaluation of normality, linearity, and homoscedasticity. The ENTER method in SPSS was used, so that all variables were entered in a single step. Regression results indicate that the model does not significantly predict therapeutic outcomes. Results are organized by dependent variable:

\[ \text{outPWB} = [R^2 = .199, R^2_{adj} = -0.10, F(6,23) = .952, p = .479]; \text{outfam} = [R^2 = .375, R^2_{adj} = .212, F(6,23) = 2.297, p = 0.070]; \text{outwsf} = [R^2 = .338, R^2_{adj} = .165, F(6,23) = 1.954, p = .115]; \text{outall} = [R^2 = .112, R^2_{adj} = -.120, F(6,23) = .483, p = .814]. \]  

A summary of regression coefficients is presented in Tables 1, 2, and 3 in Appendix C.

Test 2: Multivariate Regression

Multivariate regression with SPSS was conducted to determine the accuracy of the independent variable (distance between client and helper theoretical orientation \([\text{dispbh}]\)) predicting four therapeutic outcome well-being variables (personal \([\text{outPWB}]\); interpersonal \([\text{outfam}]\); social \([\text{outwsf}]\); and general \([\text{outall}]\)). Data screening led to no elimination of cases. No transformations were needed based on successful evaluation of normality, linearity, and homoscedasticity. The ENTER method was again used. Regression results indicate that the model does not significantly predict any of the therapeutic outcomes. Results are organized by dependent variable:

\[ \text{outPWB} = [R^2 = .003, R^2_{adj} = .033, F(6,23) = .087, p = .771]; \text{outfam} = [R^2 = .060, R^2_{adj} = .026, F(6,23) = 1.788, p = .192]; \text{outwsf} = [R^2 = .009, R^2_{adj} = -.027, F(6,23) = .245, p = .625]; \text{outall} = [R^2 = .037, R^2_{adj} = .002, F(6,23) = 1.069, p = .310]. \]  

A summary of regression coefficients is presented in Table 4 and 5 in Appendix C.

Test 3: Covariate Analysis with Process Macro

Covariate analysis with PROCESS macro with SPSS was conducted to determine the moderation effect of time variables \([\text{avgztime}]\) on the relationship between an independent
variable \([\text{dispbh}]\) and four dependent variables \([\text{outPWB}, \text{outfam}, \text{outwsf}, \text{outall}]\). Data screening led to the identification of two outliers in the time variables, which were discarded.\(^3\) No transformations were needed, as data aligned with normality, linearity, and homoscedasticity. Bootstrapping results indicate that the overall model does not significantly determine the presence of time as a moderating variable in the relationship between the independent and dependent variables. Results are organized by dependent variable: \(\text{outPWB} = [R^2 = .005, F(6,24) = .039, p = .9894]\); \(\text{outfam} = [R^2 = .110, F(6,24) = .991, p = .4139]\); \(\text{outwsf} = [R^2 = .0267, F(6,24) = .219, p = .883]\); \(\text{outall} = [R^2 = .027, F(6,24) = .219, p = .214]\). A summary of the covariate analysis is presented in Tables 6 and 7 in Appendix c.

In summary, this study tested three hypotheses: a) there are significant positive relationships among each type of therapeutic orientation and each therapeutic outcome, b) there is a significant relationship between helper and client orientation match and client therapeutic outcomes, and c) time has a moderating effect on the relationship between helper and client therapeutic orientation match and client therapeutic outcomes. The results for each of the analyses testing these hypotheses were not statistically significant. Notably, despite significant effort to recruit the target number of helper-client dyads, the sample size did not meet the necessary requirements of power; this, in turn, very likely contributed to the non-significant statistical results and an inability to provide evidence for or against these hypotheses.

\(^3\) No boxplot or Mahalinobis distance calculation was needed here, as these discrete values were around four times greater than the second-highest value in each variable. Calculating \(\text{avgztime}\) (a Z-scored average of time variables) with and without these variables showed drastic changes in its value, requiring the need for the deletion of these data points.
Chapter 5: Conclusion

This study sets forth a new and potentially productive framework to match a client to a psychotherapist. The present literature review demonstrated that the matching process—often begun by clients in distress and without any validated procedure—is neither clear nor helpful. A new procedure is needed to help to pair a client with a helper in an efficient and a research-validated manner.

The current literature has documented various attempts to match client to helper via many factors. These include worldview, race, religious affiliation, as well as myriad others. None of these potential matching factors have shown a significant impact on therapeutic outcomes in the matched dyad (Borelli et al., 2019; Cabral & Smith, 2011; Frankel, 2004; Sterling et al., 2001). As such, another way of matching a client to a helper in therapy is needed.

This research assesses the outstanding need for a better matching process. It uses theoretical orientation, normally a helper-oriented concept, and applies it to the client as well. Employing a metric for gaining data about theoretical orientation and applying it to both sides of a clinical dyad allows for a comparison between the two groups. At its core, this study assesses this comparison and measures its relationship to therapeutic outcomes.

The three main research questions are: a) Do clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time?, b) Does degree of match between clients’ and helpers' theoretical orientation families (psychodynamicism, behaviorism, and humanism) predict clients' therapeutic outcomes (individual, interpersonal, social, and overall), controlling for time?, and c) What is the moderating effect of time on the relationship between helper and client therapeutic orientation match and client therapeutic outcomes?
Limitations

This study encountered multiple limitations, possibly resulting in the non-significant results. These limitations had mainly to do with simplifying the main research question to conform to a quantitative analysis. Additionally, multiple limitations existed in the space of the assessment used, its implementation, and the setting in which it was used.

The main limitation of this study has to do with sample size and data collection. Only 30 out of the required 32 dyadic participants were obtained. Two fewer data points puts this study under power, affecting the ability of the statistical analyses to detect a true effect, if one exists. Even though \( N = 32 \) was the target for the power analysis, it is possible that hitting that number would still result in low power and non-significant results. An inflated effect size parameter might be to blame for the inaccurate power analysis. Decreasing the effect size from a medium-to-large \( f^2 = .31 \) to a more moderate \( f^2 = .15 \) (or lower) would result in a higher target sample size for this study. Further rectifying a mistake in the alpha parameter (from 0.20 to 0.05) would result in a target sample size of \( N = 98 \) (if the effect size were kept at \( f^2 = .31 \)).

The data collection process itself was another factor that limited the obtainable sample size this study, given the constraints of funding and timeline. As noted, this study required the participation of 32 dyadic pairs (in all, 64 participants). Given the nature of this field and its ethical practices pertaining to protected health information, obtaining client data proved difficult. The researcher spent many hours negotiating participation from his sample pools and had to end data collection after around three months, with less participation than the power analysis required.

The following limitations are possible and not evidence-based per se, as they are mainly theoretical points and likely subsidiary to the previously-noted factors having to do with sample
size and data collection. First, this study is quasi-theoretical—meaning it uses ideas and methods that are new or untested. As argued in the literature review, the ideas themselves have a sound, logical basis. The construct of client intrinsic orientation is a new one, developed for the present study. It is possible that this construct-turned-variable has different philosophical underpinnings that were outside of the scope of this study. If these underpinnings were inaccurate, it is possible that this variable and its measurement confounded the statistical analyses.

The revised test might have created some measure of confusion for the client participants. The Selective Theory Sorter-Revised (STS-R) was originally created for the use of helpers and uses language that helpers, not clients, could be expected to understand. Even through the process of creating the modified tests (STS-RS), it is possible that the simplified language for the clients was too strenuous, leading to test fatigue or confusion.

Akin to the previous point, the variable of matched distance between client and helper could arguably function as another study confound. This study determined the distance between theoretical orientations of client and helper by assessing clients and their helpers on a three-axis scale. Each axis, forming a three-dimensional plane, was attributable to a family of psychotherapies, namely psychodynamics, behaviorism, and humanism. This method of understanding psychotherapy, while parsimonious (as required by the practical constraints of the study) is also necessarily limiting, as there are many psychotherapies that bridge the gap between families (e.g., Gestalt psychotherapy (psychodynamics and humanism)), as well as many that are difficult to attribute to these axes overall (e.g., internal family systems). It is possible that significant information was lost in simplifying the model to test quantitatively.

This research sought to simplify the original STS-R to use it as a metric in research. Originally, the STS-R was an assessment given in a non-research-based setting (originally to be
brought home with students and worked through independently). The simplification and shortening of the STS-R possibly created problems. First, simplifying the STS-R meant that specific theories were omitted. These theories (such as family therapies and constructivist theories) did not fully fit in an axis of the model. Second, shortening the STS-R required the number of questions to be limited. Two points are important in this consideration. One is that in limiting the number of questions, the number of questions per therapeutic orientation family was also decreased, possibly limiting the effectiveness in understanding effects having to do with it, especially if specific questions were not sound. The second is that discrete questions were evaluated and either allowed into the assessment or omitted entirely. It is entirely possible that these more or less suitable incorrect questions were chosen or omitted, respectively.

This study of a matching system took place mainly with a sample from the Pittsburgh, Pennsylvania region. Pittsburgh is a relatively liberal setting that clients have a large body of therapists to choose from—at least as compared to more rural areas. It is possible that these factors changed the theoretical orientation relationship between the client and helper. A more liberal mindset might change the relationship between client and helper in some meaningful way. For example, less liberal settings (i.e., regions, counties, etc.) might have more conservative politics, leading to less outcome-oriented psychotherapies. This could lead to standards set in place to pay for only “evidence-based” approaches to therapy (e.g., behaviorism, solution-focused brief therapy, cognitive behavior therapy). This might condition helpers in the field to practice only those psychotherapies. Additionally, clients might feel less related to helpers, as they have a greater sample to choose from and can change helpers more freely.

---

4 It is important to note that this is conjecture. This researcher has not studied this possible effect.
Lastly, there is a possible limitation in acquiring the sample due to the incentive structure. This research allowed for a randomly-selected group of the sample to earn a relatively low-value Amazon gift card ($20). As this researcher collected the sample, he noted that many other PhD dissertations gave larger dollar value amounts randomly or gave every participant renumeration at a similar level as this one. A different incentive structure might allow for greater participation from the population of interest.

**Contributions of the Present Study**

Though this study did not result in statistically significant results and suffered from notable limitations, there were meaningful contributions to general research and this particular sub-field of counseling. This section will expound upon some of the potential positive attributes and contributions of this study.

First, the idea of client intrinsic orientation is a new one. Given an exhaustive review of the literature, client orientation to therapy has never been researched. The closest researchers seem to have come has been the idea of worldview, which was then compared to clinician worldview (Lyddon & Adamson, 1992). Client orientation to psychotherapy has the potential to be a powerful central point, allowing for more questions and possible research (see Future Work and Commentary section below).

Second, this study puts forth a new way to measure both client and helper orientation to psychotherapy. This method is simpler and allows the STS-RS to be used in research spaces. The STS-RS (or some future variant) might be used in continued research, such as theory matching or development of the client orientation construct (or indeed any of the Future Work research possibilities).
Third, this project produced, albeit inadvertently, a method for data collection that was very effective, if laborious. As this researcher was attempting to gain his sample, he found the general petition to find helpers who were willing to participate frustrating and arduous. Very few of the participants in his sample turned out to come from professional contacts in his area or word-of-mouth interest from other professionals, as was initially anticipated. He instead turned to another of his sample sources: listservs. He used CounselingGrads and CESNET specifically to increase awareness of his study. He noticed that a more active approach to data collection was needed—rather than that of passively emailing and advertising the study. In addition to this, he petitioned other researchers (frequently other doctoral students) to complete his study in a quid-pro-quo fashion. He completed their study and asked them to complete his, if they met the inclusion criteria. This recruitment approach contributed to more than three-quarters of the sample. It must be noted, that engaging this structure was arduous and time-consuming, as the studies this researcher completed for his part in the quid-pro-quo exchange lasted anywhere from 10 to 45 minutes. This method of data collection might be used by future researchers to round out their sample, though they must be aware that it will likely take a significant amount of time and energy to facilitate. It should be used only when needed and when the sacrifice of time and energy is required to meet the needs of the study's power analysis. Nonetheless, future researchers, especially those engaged in data collection for their dissertation, may benefit from having on their radar this recruitment approach.

Last, a three-dimensional understanding of theoretical orientation is a research-rich vein for future studies. Understanding theories of psychotherapy through the lens of general historical “families” allows for a logical method of grouping psychotherapeutic theories and translates well into quantifying it for statistical analysis. Furthermore, using this quantitative understanding of
theoretical orientation to create three-dimensional plots and, as this study attempted, distance measurements in that plane can lead to many comparisons and correlations that might progress our understanding of the application of theoretical orientation in modern research.

**Common Factors**

Common factors in psychotherapy refer to the idea that all psychotherapies are comprised of overarching factors that lead to positive outcomes in clients. This research used the Heart and Soul Model (Hubble et al., 1999), which groups common factors thus: a) extratherapeutic factors, b) hope, placebo, and expectations, c) relationship factors, and d) model and technique factors. Each of these groups accounts for a certain percentage of psychotherapeutic outcomes. Two might impact this research, including relationship factors, which make up around 30% of outcomes and model and technique factors, which comprise around 15% of outcomes in therapy. Overall, these factors account for 45% of psychotherapeutic outcomes.

This study attempted to capitalize on this large share of impacts in therapy, by reasonably aggregating relationship factors and model and technique factors together. Each of these groups of common factors are inextricably part of the psychotherapeutic process between helper and client. Research question 1 specifically attempts to understand outcomes based on different psychotherapeutic theories, each having different ideas about how relationships are important (e.g., cognitive behavior therapy does not focus effort on the relationship, while client-centered therapy chiefly works to manage and build the relationship). Each theory also has its own model of personality, technique, and values that inform those who use it. The focus of this study—theoretical orientation matching—is a natural aggregate of the two factors.

It is unclear how this study impacts the understanding of common factors. Aside from the study’s non-significant results (due largely to low power), this study was unable to reach any of
the aforementioned goalposts (15%, 30%, or 45%). We could conclude that relationship factors, and model and technique factors do not contribute to matching, similarly to the idea that technique and model factors in common factors comprise 15% of therapeutic outcomes.

Two factors yet stand as possible matching facilitators. Together, extratherapeutic factors and hope, placebo, and expectations add up to 55% of outcomes in therapy. This begs an important question: What might matching based on these two factors look like?

Extratherapeutic factors include anything that does not exist within the therapeutic environment, both spatially and temporally. For example, the safety of the household that a client comes back to can impact how they engage in psychotherapy, leading to greater, or lesser, outcomes. Matching could occur based on trauma history, place of residence, or any other such factor outside of the usual therapeutic parameters. Perhaps an even greater effect could be had outside of therapeutic hours, meaning in-person check-ups by a therapeutic team or the assigned helper. Matching a client to a helper who is willing and able to attend to them outside of therapy could lead to much greater outcomes for clients.

Matching using hope, placebo, and expectations is somewhat more of a confusing prospect. At minimum, constructs like hope and expectations could be quantified using an assessment and then matched based on similar scores for helpers. Similar to this study, whether or not a client on the low side of hope would better respond to a low-hope helper or a high-hope helper is yet to be seen.

Due to the non-significant results of this study, we can possibly surmise that the change factors inherent in the Heart and Soul model of common factors (Hubble et al., 1999) stands. Extratherapeutic factors might be able to help clients and helpers to match more successfully in the future. This could be a realm of research as yet undiscovered in modern psychotherapeutic
research. In addition, the general idea of client intrinsic orientation is new to the field of psychotherapy and could fundamentally change how common factors work. It is possible that each of the four Heart and Soul model common factors has a corresponding client side. More research would be needed to understand if a new common factor could be total buy-in by the client or that each common factor has a client-side equivalent.

Future Work and Commentary

This project creates many possible avenues of future research. Some of these avenues are theoretical—meaning having to do with psychotherapeutic theory—whereas others are more application-based. There was some hope involved in the outset of this research: that a connection between theoretical orientation between client and helper could be a potentially revolutionary concept in matching client to helper and organizing a system based on that concept. Though empirical support for this idea could not be provided in the present work, the hope remains.

The first point of future work would be to attempt this research again, having learned from its shortcomings and with more abundant resources for recruitment. In order to do this, some kind of infrastructure would be needed to ensure that the sample size is met. The target sample size for this study was, at minimum, 32 dyadic pairs. Ideally, such a study might have around 90 dyadic pairs, which would reflect a more stringent criterion for sample size based not only on a power analysis, but also the number of predictors (15 x 6 (number of predictors)). To meet this larger target sample size, a clinic or academic setting could be helpful to get more participants. Such settings would have many of all required dyadic positions: clients and helpers. A large clinic, consisting of around 20 clinicians would have, at minimum, 600 clients (20 helpers x 30 caseload clients). Multiple settings (and a relaxation of this study’s standard of one

---

5 90 dyadic participants came from a post-data-collection conversation with the dissertation committee. 15 participants per predictor comes from Stevens (2002).
helper to one client) would easily reach the 90 dyadic pairs more stringent sample size guideline (though perhaps statistical and/or analytical adjustments would need to be made for such nesting of clients within shared helpers).

It could be that this model of matching is part of a greater whole. After a review of the literature, many different factors were identified as possible matching criteria, including gender, religious affiliation, worldview, etc. In previous studies, matching on these factors in general did not significantly predict more desirable outcomes. An attempt at measuring all of these factors together—including this study's client-to-helper orientation matchup—could result in a better aggregate matching model which in turn is better equipped to capture meaningful relations with client outcomes in an empirical study. It would take a much larger organization or effort (outside of the resources of a dissertating student) to assemble these variables, create a useable measurement tool, and implement it with a considerably larger sample.

A question that surfaced in the nascent versions of the present research study was, “Does the helper’s chosen theoretical orientation match the results of the STS-RS?” This question was abandoned, yet this researcher finds it an interesting prospect to measure a helper’s theoretical orientation against their own knowledge and application of their work. A previous iteration of the STS-RS asked clinicians what their orientations were. This researcher wonders whether helpers have the awareness of their own orientations and if they would be similar to tested results. Furthermore, a discrepancy in findings could be tested to correlate to changes in client-helper outcomes. Unfortunately, there are three levels to this consideration: a) the helper’s stated theoretical orientation, b) the STS-RS as a potential source of measurement error, and c) the actual way that helpers practice in a session. There are many difficulties in observing and
measuring this last point, though a qualitative study could help to shed light on this through the analysis of session transcripts and videos.

The STS-RS is a new measure, adapted from the older STS-R. Reliability and validity measurements from the STS-R were minimal and beyond the scope of the present work. First, a more thorough psychometric validation study is required for the STS-R, as it is lacking in the literature. In addition, this researcher would recommend full reliability and validity studies on the STS-RS, or some improved variation that builds on the preliminary version used in the present study, to help legitimize and improve it for future work.

Theoretical orientation to therapy changes over time. This poses a difficulty in longitudinal usefulness of the STS-RS. Not only would it be helpful for longitudinal studies to mark how orientation changes over time using the STS-RS, it would also be useful to find how often the STS-RS would need to be conducted. All of these points are important to study for the AICO as well, though the construct of client theoretical orientation is new and might not follow the same rules helper theoretical orientation.

Client theoretical orientation is a new concept. As reviewed earlier in this paper, there is no reference in the extant literature to the idea of a client’s theoretical orientation to therapy. This study assumes that client theoretical orientation exists; though it is a reasonable assumption derived from the conceptual work in this field, it is not firmly rooted in empirical literature and thus leaves room for future research. Qualitative studies are needed to assess whether client theoretical orientation exists, what it means, and how it might be similar or different than helper theoretical orientation. For example, a grounded theory approach to this study could be uniquely helpful in building the idea inductively from any themes that may emerge from the qualitative data.
The creation of a three-dimensional space in theoretical orientation creates many possibilities for future research. This study uses such a three-dimensional plane to measure distance between two points. A natural extension of this would be to create regular cubed zones on the plane. Researchers might be able to derive meaning from these cubes. Some possible future research questions are: “Can people with similar professed orientations be grouped in similar ‘cubes’ in the model?” or “What does it mean for clients or helpers to find their orientation in more extreme cubes (i.e., those that exist very close to the x, y, z origin, at extreme values (around 20 in this model) on any axis, or at the extreme on all axes (approaching 20))?” Could this signal “difficult” groups of clients, based on correlated outcome results? Could this show less effective or more experimental subjective helper orientations to therapy, given related therapeutic outcomes?

Last, this research opens the door to real applications. Matching helper theoretical orientation and client intrinsic orientation is a process that could occur in the real world. Currently, the model of matching is largely profile-based, allowing for much error between the inaccuracy of the profile itself and jargon or understanding errors for the prospective client. A real-world application or website using questionnaires similar to this research would allow for a calculated approach to occur. Furthermore, the ability for this application to correct itself over time using real data is promising. Such a program would allow for the question of orientation to therapy to continue to be tested, as well as bringing in previously-mentioned factors (such as demographics, location, communication styles, etc.) to continue to round out errors and increase accuracy and applicability of the program in its entirety. Such technology could allow for a new

---

6 Imagine a three-axis plane. Now, at even intervals along each axis (perhaps at 5, 10, etc.), produce a perpendicular line to the axis line. This will create perfect regular cubes in the model.

7 Figure B2 provides a helpful visual aid in understanding the “cubes” mentioned here.
platform that decreases beginning hurdles for clients and helpers, allowing psychotherapeutic work to occur quicker and with fewer ongoing difficulties.

Conclusion

This study shows the need for a better understanding of both matching and theoretical orientation in psychotherapy. It continues the pattern of non-significant results inherent in the matching research. I hope that it also adds some new thoughts and perspectives that might continue the research sub-field. Matching seems to be an area of frequent trial, but with its commercialization and capitalization, there is little movement forward unless there is financial gain.

Theoretical orientation continues to be an elusive variable in this research and its contribution to the research base. This study was an ambitious venture in defining, understanding, and quantifying a concept that helpers spend their entire careers attempting to comprehend. Indeed, many helpers change orientations to psychotherapy multiple times in their careers, including in the middle and toward the end! Theoretical orientation merits continued and rigorous research, used to assist helpers in discovering and maintaining their essential relationship to this field.

I hope that the myriad ideas in this research, including a three-dimensional understanding of orientation (or its use in understanding other variables), a spectrum-oriented approach to theoretical orientation, theoretical orientation versus matching in psychotherapy, and ideas around correlation between outcomes and other variables could lead to significant and helpful progress in psychotherapy research. Research in this rich vein is nowhere near complete and will, I hope, lead to many research agendas and helpful outcomes for clients.
References


http://drjosephhammer.com/psych-grad-school/counseling-psychology-vs-clinical-psychology/


Clinical Psychology: Science and Practice, 2(1), 45–69.


Appendix A: Assessments

Figure A1

Selective Theory Sorter—Revised, Shortened

Please answer the questions below in the space provided or choose the option that fits you best.

1. Code (attained via instructions) ____________________________________________

2. Number of years practicing post-Master’s/terminal degree __________

3. Type of helping professional (please circle one option)
   social worker   counselor   marriage and family therapist   psychologist

4. How many sessions have you completed with this client? ________________

Please read the following statements and indicate the strength of your beliefs as to how much the statement is like you. For example, if you believe the statement presented in item 12, “People are sexual beings,” describes your beliefs very well, you might circle the “Very” option. Please circle one answer per prompt.

5. Recognizing cognitive processing in emotions and behavior is central in therapy.
   Not at all   A little   Somewhat   Very   Extremely

6. Clients must take ultimate responsibility for the way their life is lived.
   Not at all   A little   Somewhat   Very   Extremely

7. Human problems stem not from external events or situations but from people’s views or beliefs about them.
   Not at all   A little   Somewhat   Very   Extremely

8. Everyone is unique.
   Not at all   A little   Somewhat   Very   Extremely

9. Coming to grips with the unconscious part of the personality is the only way to truly achieve individuation.
   Not at all   A little   Somewhat   Very   Extremely

10. The central focus of counseling should be the client’s experiencing of feelings.
    Not at all   A little   Somewhat   Very   Extremely
11. The past determines the present, even though human motivation should be focused on
the future.
   Not at all    A little    Somewhat    Very    Extremely

12. There is no such thing as free will or voluntary behavior.
   Not at all    A little    Somewhat    Very    Extremely

13. Each person is unique and has the ability to reach full potential.
   Not at all    A little    Somewhat    Very    Extremely

14. A warm relationship between the therapist and client is not a necessary or sufficient
condition for effective personality change.
   Not at all    A little    Somewhat    Very    Extremely

15. How a person thinks largely determines how that person feels and behaves.
   Not at all    A little    Somewhat    Very    Extremely

16. The role in the family is one of the biggest influences in determining the personality
characteristics of the client.
   Not at all    A little    Somewhat    Very    Extremely

17. The purpose of therapy is to bring the unconscious to the conscious.
   Not at all    A little    Somewhat    Very    Extremely

18. Personality is constructed through the attribution of meaning.
   Not at all    A little    Somewhat    Very    Extremely

19. Childhood events are the baseline for adult personality.
   Not at all    A little    Somewhat    Very    Extremely
Assessment of Intrinsic Client Orientation (AICO)

Please answer the questions below in the space provided or choose the option that fits you best.

1. Code (given by therapist) ____________________________

2. Age _____

3. How long have you been in therapy in your lifetime, including previous therapy? (Please do not include time not in therapy between therapists or time searching for therapy) ____________________________

Please read the following statements and indicate which response best reflects your beliefs about your progress in therapy so far with your current therapist. Each question measures a different part of progress. If you are feeling worse due to therapy, please mark the “Not at all” option.

4. How much better are you feeling about your personal well-being due to therapy?
   Not at all   A little   Somewhat   Very   Extremely

5. How much better are you feeling about your family and close relationships due to therapy?
   Not at all   A little   Somewhat   Very   Extremely

6. How much better are you feeling about your work, school, and friendship relationships due to therapy?
   Not at all   A little   Somewhat   Very   Extremely

7. How much better are you feeling about overall (general sense of well-being) due to therapy?
   Not at all   A little   Somewhat   Very   Extremely

Please read the following statements and indicate which response best reflects your beliefs. For example, if you believe the statement, “People are sexual beings,” describes your beliefs very well, you might circle the “Very” option. Please circle only one answer per prompt.

8. Recognizing how one thinks through emotions and behaviors is central to therapy.
   Not at all   A little   Somewhat   Very   Extremely

9. Clients must take ultimate responsibility for the way their lives are lived.
   Not at all   A little   Somewhat   Very   Extremely
10. Personal problems stem *not* from external events or situations *but* from people’s views or beliefs about those events or situations.

   Not at all    A little   Somewhat   Very   Extremely

11. Everyone is unique.

   Not at all    A little   Somewhat   Very   Extremely

12. Understanding our innate and underlying personality traits is the only way to truly grow and thrive.

   Not at all    A little   Somewhat   Very   Extremely

13. The central focus of counseling should be the client’s experiencing of feelings.

   Not at all    A little   Somewhat   Very   Extremely

14. While the past and the present are important, human motivation and change should be focused on the future.

   Not at all    A little   Somewhat   Very   Extremely

15. There is no such thing as free will or voluntary behavior.

   Not at all    A little   Somewhat   Very   Extremely

16. Each person has the ability to reach his or her full potential.

   Not at all    A little   Somewhat   Very   Extremely

17. A warm relationship between the therapist and client is a necessary condition for effective personality change.

   Not at all    A little   Somewhat   Very   Extremely

18. How one thinks largely determines how he or she feels and behaves.

   Not at all    A little   Somewhat   Very   Extremely

19. A person’s role in the family greatly influences his or her personality development.

   Not at all    A little   Somewhat   Very   Extremely

20. The purpose of therapy is to make clients aware of underlying issues.

   Not at all    A little   Somewhat   Very   Extremely
21. A person’s personality develops based on the meaning they make of themselves, their environment, and their interactions with others.

   Not at all   A little   Somewhat   Very   Extremely

22. What happens in a person’s childhood is a main factor in their personality as an adult.

   Not at all   A little   Somewhat   Very   Extremely
Appendix B: Theoretical Sketches

Figure B1

*Three-dimensional Theoretical Orientation Mockup*

\[ \text{client} (x, y, z) = 5, 36, 24 \]
\[ \text{helper} (x, y, z) = 27, 13, 18 \]

\[ = 34.87 \]

\[ \text{client} (x, y, z) = 10, 2, 38 \]
\[ \text{helper} (x, y, z) = 15, 1, 33 \]

\[ = 7.14 \]
Figure B2

Three-dimensional “Cubed” Theoretical Orientation Mockup
Appendix C: Statistical Analysis Tables and Figures

Table 1

Model Summary Table for Multivariate Multiple Regression (RQ1)

<table>
<thead>
<tr>
<th>DV (outcomes)</th>
<th>R</th>
<th>R²</th>
<th>Adj. R²</th>
<th>Std. Error of Estimate</th>
<th>R² Δ</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal wellbeing</td>
<td>.446</td>
<td>.199</td>
<td>-.010</td>
<td>.590</td>
<td>.199</td>
<td>0.952</td>
<td>6</td>
<td>23</td>
<td>.479</td>
</tr>
<tr>
<td>Family, close relationships</td>
<td>.612</td>
<td>.375</td>
<td>.212</td>
<td>.605</td>
<td>.375</td>
<td>2.230</td>
<td>6</td>
<td>23</td>
<td>.700</td>
</tr>
<tr>
<td>Work, school, friendships</td>
<td>.581</td>
<td>.338</td>
<td>.165</td>
<td>.575</td>
<td>.338</td>
<td>1.954</td>
<td>6</td>
<td>23</td>
<td>.115</td>
</tr>
<tr>
<td>Overall</td>
<td>.334</td>
<td>.112</td>
<td>-.120</td>
<td>.665</td>
<td>.112</td>
<td>0.483</td>
<td>6</td>
<td>23</td>
<td>.814</td>
</tr>
</tbody>
</table>

Table 2

ANOVA Table for Multivariate Multiple Regression (RQ1)

<table>
<thead>
<tr>
<th>DV (outcomes)</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal wellbeing</td>
<td>Regression</td>
<td>1.989</td>
<td>6</td>
<td>0.331</td>
<td>0.952</td>
<td>0.479</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>8.011</td>
<td>23</td>
<td>0.348</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>10.000</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family, close relationships</td>
<td>Regression</td>
<td>5.046</td>
<td>6</td>
<td>0.841</td>
<td>2.297</td>
<td>0.070</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>8.421</td>
<td>23</td>
<td>0.366</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work, school, friendships</td>
<td>Regression</td>
<td>3.871</td>
<td>6</td>
<td>0.645</td>
<td>1.954</td>
<td>0.115</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>7.595</td>
<td>23</td>
<td>0.330</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Regression</td>
<td>1.283</td>
<td>6</td>
<td>0.214</td>
<td>0.483</td>
<td>0.814</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>10.184</td>
<td>23</td>
<td>0.443</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3

**Coefficients Table for Multivariate Multiple Regression (RQ1)**

<table>
<thead>
<tr>
<th>DV (outcomes)</th>
<th>Model (IV)</th>
<th>Unst. β</th>
<th>Std. Error</th>
<th>St. Co.β</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Zero-order</td>
<td>Partial</td>
</tr>
<tr>
<td>Personal wellbeing</td>
<td>Constant</td>
<td>.807</td>
<td>.1743</td>
<td>0.463</td>
<td>.648</td>
<td></td>
<td>.146</td>
<td>.077</td>
</tr>
<tr>
<td></td>
<td>Helper - psychodynamicism</td>
<td>.020</td>
<td>.053</td>
<td>.081</td>
<td>.369</td>
<td>.715</td>
<td>.179</td>
<td>.103</td>
</tr>
<tr>
<td></td>
<td>Helper - behaviorism</td>
<td>.032</td>
<td>.064</td>
<td>.107</td>
<td>.495</td>
<td>.626</td>
<td>.342</td>
<td>.366</td>
</tr>
<tr>
<td></td>
<td>Helper - humanism</td>
<td>.119</td>
<td>.063</td>
<td>.383</td>
<td>1.888</td>
<td>.072</td>
<td>.196</td>
<td>.218</td>
</tr>
<tr>
<td></td>
<td>Client - psychodynamicism</td>
<td>.044</td>
<td>.041</td>
<td>.222</td>
<td>1.071</td>
<td>.295</td>
<td>.081</td>
<td>.058</td>
</tr>
<tr>
<td></td>
<td>Client - behaviorism</td>
<td>.016</td>
<td>.056</td>
<td>.057</td>
<td>.276</td>
<td>.785</td>
<td>.058</td>
<td>.174</td>
</tr>
<tr>
<td></td>
<td>Client - humanism</td>
<td>-.057</td>
<td>.067</td>
<td>-.196</td>
<td>-.847</td>
<td>.406</td>
<td>.058</td>
<td>-.174</td>
</tr>
<tr>
<td>relationships</td>
<td>Helper - psychodynamicism</td>
<td>.014</td>
<td>.054</td>
<td>.048</td>
<td>.249</td>
<td>.806</td>
<td>.364</td>
<td>.325</td>
</tr>
<tr>
<td></td>
<td>Helper - behaviorism</td>
<td>.109</td>
<td>.066</td>
<td>.315</td>
<td>1.646</td>
<td>.113</td>
<td>.311</td>
<td>.242</td>
</tr>
<tr>
<td></td>
<td>Helper - humanism</td>
<td>.077</td>
<td>.065</td>
<td>.214</td>
<td>1.194</td>
<td>.245</td>
<td>.406</td>
<td>.304</td>
</tr>
<tr>
<td></td>
<td>Client - psychodynamicism</td>
<td>.064</td>
<td>.042</td>
<td>.281</td>
<td>1.531</td>
<td>.139</td>
<td>.171</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td>Client - behaviorism</td>
<td>.022</td>
<td>.058</td>
<td>.071</td>
<td>.387</td>
<td>.703</td>
<td>.359</td>
<td>.158</td>
</tr>
<tr>
<td></td>
<td>Client - humanism</td>
<td>.053</td>
<td>.069</td>
<td>.157</td>
<td>.766</td>
<td>.452</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work, school,</td>
<td>Constant</td>
<td>7.085</td>
<td>1.697</td>
<td>.639</td>
<td>.529</td>
<td></td>
<td>-.180</td>
<td>-.302</td>
</tr>
<tr>
<td>friendships</td>
<td>Helper - psychodynamicism</td>
<td>-.078</td>
<td>.052</td>
<td>-.301</td>
<td>-1.519</td>
<td>.142</td>
<td>-.180</td>
<td>-.302</td>
</tr>
<tr>
<td></td>
<td>Helper - behaviorism</td>
<td>.070</td>
<td>.063</td>
<td>.220</td>
<td>1.120</td>
<td>.274</td>
<td>.145</td>
<td>.227</td>
</tr>
<tr>
<td></td>
<td>Helper - humanism</td>
<td>.142</td>
<td>.062</td>
<td>.425</td>
<td>2.302</td>
<td>.031</td>
<td>.337</td>
<td>.433</td>
</tr>
<tr>
<td></td>
<td>Client - psychodynamicism</td>
<td>.069</td>
<td>.040</td>
<td>.329</td>
<td>1.743</td>
<td>.095</td>
<td>.311</td>
<td>.342</td>
</tr>
<tr>
<td></td>
<td>Client - behaviorism</td>
<td>.041</td>
<td>.055</td>
<td>.141</td>
<td>.747</td>
<td>.463</td>
<td>.059</td>
<td>.154</td>
</tr>
<tr>
<td></td>
<td>Client - humanism</td>
<td>-.085</td>
<td>.066</td>
<td>-.273</td>
<td>-1.299</td>
<td>.207</td>
<td>.009</td>
<td>-.261</td>
</tr>
<tr>
<td>Overall</td>
<td>Constant</td>
<td>1.797</td>
<td>1.965</td>
<td>0.914</td>
<td>.370</td>
<td></td>
<td>.044</td>
<td>-.066</td>
</tr>
<tr>
<td></td>
<td>Helper - psychodynamicism</td>
<td>-.019</td>
<td>.060</td>
<td>-.073</td>
<td>-0.319</td>
<td>.753</td>
<td>.189</td>
<td>.187</td>
</tr>
<tr>
<td></td>
<td>Helper - behaviorism</td>
<td>.066</td>
<td>.073</td>
<td>.207</td>
<td>.911</td>
<td>.372</td>
<td>.041</td>
<td>-.023</td>
</tr>
<tr>
<td></td>
<td>Helper - humanism</td>
<td>-.008</td>
<td>.071</td>
<td>-.023</td>
<td>-0.109</td>
<td>.914</td>
<td>.256</td>
<td>.166</td>
</tr>
<tr>
<td></td>
<td>Client - psychodynamicism</td>
<td>.037</td>
<td>.046</td>
<td>.176</td>
<td>.806</td>
<td>.428</td>
<td>.118</td>
<td>.098</td>
</tr>
<tr>
<td></td>
<td>Client - behaviorism</td>
<td>.030</td>
<td>.063</td>
<td>.104</td>
<td>.474</td>
<td>.640</td>
<td>.181</td>
<td>.091</td>
</tr>
<tr>
<td></td>
<td>Client - humanism</td>
<td>.033</td>
<td>.076</td>
<td>.107</td>
<td>.439</td>
<td>.665</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

*Multivariate Regression Output 1 (RQ2)*

<table>
<thead>
<tr>
<th>Source</th>
<th>DV (outcomes)</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>Personal wellbeing</td>
<td>.031</td>
<td>1</td>
<td>.031</td>
<td>0.087</td>
<td>.771</td>
</tr>
<tr>
<td></td>
<td>Family, close relationships</td>
<td>.808</td>
<td>1</td>
<td>.808</td>
<td>1.788</td>
<td>.192</td>
</tr>
<tr>
<td></td>
<td>Work, school, friendships</td>
<td>.099</td>
<td>1</td>
<td>.099</td>
<td>0.245</td>
<td>.625</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>.422</td>
<td>1</td>
<td>.422</td>
<td>1.069</td>
<td>.310</td>
</tr>
<tr>
<td>Intercept</td>
<td>Personal wellbeing</td>
<td>72.895</td>
<td>1</td>
<td>72.895</td>
<td>204.737</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Family, close relationships</td>
<td>85.271</td>
<td>1</td>
<td>85.271</td>
<td>188.620</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Work, school, friendships</td>
<td>65.930</td>
<td>1</td>
<td>65.930</td>
<td>162.400</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>91.872</td>
<td>1</td>
<td>91.872</td>
<td>232.904</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>DisPBH</td>
<td>Personal wellbeing</td>
<td>.031</td>
<td>1</td>
<td>.031</td>
<td>0.087</td>
<td>.771</td>
</tr>
<tr>
<td></td>
<td>Family, close relationships</td>
<td>.808</td>
<td>1</td>
<td>.808</td>
<td>1.788</td>
<td>.192</td>
</tr>
<tr>
<td></td>
<td>Work, school, friendships</td>
<td>.099</td>
<td>1</td>
<td>.099</td>
<td>0.245</td>
<td>.625</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>.422</td>
<td>1</td>
<td>.422</td>
<td>1.069</td>
<td>.310</td>
</tr>
<tr>
<td>Error</td>
<td>Personal wellbeing</td>
<td>9.969</td>
<td>28</td>
<td>.356</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family, close relationships</td>
<td>12.658</td>
<td>28</td>
<td>.452</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work, school, friendships</td>
<td>11.367</td>
<td>28</td>
<td>.406</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>11.045</td>
<td>28</td>
<td>.394</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Personal wellbeing</td>
<td>490.000</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family, close relationships</td>
<td>462.000</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work, school, friendships</td>
<td>460.000</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>524.000</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>Personal wellbeing</td>
<td>10.000</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family, close relationships</td>
<td>13.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work, school, friendships</td>
<td>11.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>11.467</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Table 5**

*Multivariate Regression Output 2 (RQ2)*

<table>
<thead>
<tr>
<th>DV (outcomes)</th>
<th>Parameter</th>
<th>β</th>
<th>Std. Error</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal wellbeing</td>
<td>Intercept</td>
<td>3.926</td>
<td>.274</td>
<td>14.309</td>
<td>&lt;.001</td>
<td>3.364</td>
<td>4.488</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>.013</td>
<td>.045</td>
<td>0.294</td>
<td>.771</td>
<td>-0.078</td>
<td>0.104</td>
<td></td>
</tr>
<tr>
<td>Family, close relationships</td>
<td>Intercept</td>
<td>4.246</td>
<td>.309</td>
<td>13.734</td>
<td>&lt;.001</td>
<td>3.613</td>
<td>4.879</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>.067</td>
<td>.050</td>
<td>-1.337</td>
<td>.192</td>
<td>-0.170</td>
<td>0.036</td>
<td></td>
</tr>
<tr>
<td>Work, school, friendships</td>
<td>Intercept</td>
<td>3.734</td>
<td>.293</td>
<td>12.744</td>
<td>&lt;.001</td>
<td>3.134</td>
<td>4.334</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>.024</td>
<td>.048</td>
<td>0.495</td>
<td>.625</td>
<td>-0.740</td>
<td>0.121</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Intercept</td>
<td>4.407</td>
<td>.289</td>
<td>15.261</td>
<td>&lt;.001</td>
<td>3.816</td>
<td>4.999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>-.048</td>
<td>.047</td>
<td>-1.034</td>
<td>.310</td>
<td>-0.145</td>
<td>0.048</td>
<td></td>
</tr>
</tbody>
</table>

**Table 6**

*Covariate Analysis Model Summary (RQ3)*

<table>
<thead>
<tr>
<th>DV (outcomes)</th>
<th>R</th>
<th>R²</th>
<th>Mean Sq. Error</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal wellbeing</td>
<td>.070</td>
<td>.005</td>
<td>.326</td>
<td>.039</td>
<td>3.00</td>
<td>24.00</td>
<td>.989</td>
</tr>
<tr>
<td>Family, close relationships</td>
<td>.332</td>
<td>.110</td>
<td>.450</td>
<td>.990</td>
<td>3.00</td>
<td>24.00</td>
<td>.412</td>
</tr>
<tr>
<td>Work, school, friendships</td>
<td>.163</td>
<td>.027</td>
<td>.410</td>
<td>.219</td>
<td>3.00</td>
<td>24.00</td>
<td>.883</td>
</tr>
<tr>
<td>Overall</td>
<td>.409</td>
<td>.167</td>
<td>.342</td>
<td>1.605</td>
<td>3.00</td>
<td>24.00</td>
<td>.214</td>
</tr>
</tbody>
</table>
### Table 7

*Covariate Analysis Model Output (RQ3)*

<table>
<thead>
<tr>
<th>DV (outcomes)</th>
<th>Source</th>
<th>Coefficient</th>
<th>St. Error</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal wellbeing</td>
<td>constant</td>
<td>3.977</td>
<td>.266</td>
<td>14.971</td>
<td>.000</td>
<td>.343</td>
<td>4.526</td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>-.008</td>
<td>.044</td>
<td>-.188</td>
<td>.853</td>
<td>-.099</td>
<td>.082</td>
</tr>
<tr>
<td></td>
<td>Avgztime</td>
<td>-.168</td>
<td>.584</td>
<td>-.287</td>
<td>.777</td>
<td>-1.373</td>
<td>1.038</td>
</tr>
<tr>
<td></td>
<td>Intercept</td>
<td>.019</td>
<td>.079</td>
<td>.239</td>
<td>.813</td>
<td>-.144</td>
<td>.182</td>
</tr>
<tr>
<td>Family, close relationships</td>
<td>constant</td>
<td>4.296</td>
<td>.312</td>
<td>13.776</td>
<td>.000</td>
<td>3.652</td>
<td>4.939</td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>-.084</td>
<td>.051</td>
<td>-1.637</td>
<td>.115</td>
<td>-.190</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Avgztime</td>
<td>-.435</td>
<td>.686</td>
<td>-.635</td>
<td>.531</td>
<td>-1.850</td>
<td>.980</td>
</tr>
<tr>
<td></td>
<td>Intercept</td>
<td>.050</td>
<td>.093</td>
<td>.541</td>
<td>.594</td>
<td>-.141</td>
<td>.241</td>
</tr>
<tr>
<td>Work, school, friendships</td>
<td>constant</td>
<td>3.753</td>
<td>.298</td>
<td>12.596</td>
<td>.000</td>
<td>3.138</td>
<td>4.369</td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>.010</td>
<td>.049</td>
<td>.207</td>
<td>.838</td>
<td>-.091</td>
<td>.112</td>
</tr>
<tr>
<td></td>
<td>Avgztime</td>
<td>.307</td>
<td>.655</td>
<td>.468</td>
<td>.644</td>
<td>-1.045</td>
<td>1.659</td>
</tr>
<tr>
<td></td>
<td>Intercept</td>
<td>-.057</td>
<td>.088</td>
<td>-.643</td>
<td>.526</td>
<td>-.239</td>
<td>.126</td>
</tr>
<tr>
<td>Overall</td>
<td>constant</td>
<td>4.451</td>
<td>.272</td>
<td>16.351</td>
<td>.000</td>
<td>3.889</td>
<td>5.013</td>
</tr>
<tr>
<td></td>
<td>DisPBH</td>
<td>-.073</td>
<td>.045</td>
<td>-1.617</td>
<td>.119</td>
<td>-.165</td>
<td>.020</td>
</tr>
<tr>
<td></td>
<td>Avgztime</td>
<td>.589</td>
<td>.598</td>
<td>.984</td>
<td>.335</td>
<td>-.646</td>
<td>1.824</td>
</tr>
<tr>
<td></td>
<td>Intercept</td>
<td>-.108</td>
<td>.081</td>
<td>-1.336</td>
<td>.194</td>
<td>-.275</td>
<td>.059</td>
</tr>
</tbody>
</table>
Appendix D: IRB Approval

[External] Expedited Review Approved by Chair - IRB ID: 2023/01/6

Duquesne IRB <noreply@axiommentor.com>
Sun 3/5/2023 9:27 PM
To: Dan Rhodes <rhodesd1@duq.edu>

Downloadable Attachments:
2023-01-06 Consent Stamped.pdf
Expedited Review Approved by Chair - IRB ID: 2023/01/6.pdf

To: Daniel Rhodes
From: David DeImonico, IRB Chair
Subject: Protocol #2023/01/6 - Approval Notification
Date: 03/05/2023

The protocol Using a Three-dimensional Theoretical Orientation Matching Model to Predict Therapeutic Outcomes has been approved by the IRB Chair under the rules for expedited review on 03/05/2023.

The consent form is stamped with IRB approval and a three-year expiration date. You should use the stamped forms as originals for copies that you distribute or display.

The approval of your study is valid through 03/01/2026, by which time you must submit an annual report either closing the protocol or requesting permission to continue the protocol for another year. Please submit your report by 02/01/2026 so that the IRB has time to review and approve your report if you wish to continue it for another year.

If, prior to the next review, you propose any changes in your procedure or consent process, you must complete an amendment form of these changes and submit it to the IRB Chair for approval. Please wait for the approval before implementing any changes to the original protocol. In addition, if any unanticipated problems or adverse effects on subjects are discovered before the annual review, you must immediately report them to the IRB Chair before proceeding with the study.

When the study is complete, please terminate the study via Mentor by completing the form under the Continual Renewal tab at the bottom of your protocol page and clicking on terminate. Please keep a copy of your research records, other than those you have agreed to destroy for confidentiality, over a period of five years after the study’s completion.

If you have any questions, feel free to contact me.

David DeImonico, Ph.D.
Institutional Review Board, Chair
irb@duq.edu