AN INVESTIGATION OF THE POSSIBLE MECHANISMS OF CHANGE IN SUPPORTIVE-EXPRESSIVE THERAPY FOR DEPRESSED / ANXIOUS ADOLESCENTS

by

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Abstract

The present research explores a promising therapy – Supportive Expressive Therapy (SET; Luborsky, 1984) – for adolescents with mood and/or anxiety disorders. It has been proposed that therapist expressive techniques (e.g., challenges and interpretations) and client interpersonal mastery (i.e., self-understanding and self-control in relationships) are two elements central to the success of SET (Luborsky, 1984; Grenyer & Luborsky, 1996). The current thesis employs a microprocess approach to examine expressive techniques and interpersonal mastery as potential mechanisms of change in SET.

The study first provides preliminary evidence that SET is effective in helping adolescents suffering from internalizing disorders. Clients (N = 10) reported significantly fewer symptoms of depression and anxiety post-therapy. The body of the study then focuses on two research questions pertaining to the microprocesses occurring during SET. First, employing graphical and statistical analyses, the study investigates the notion that SET helps clients develop greater interpersonal mastery. Ten clients’ levels of interpersonal mastery were assessed at four points throughout therapy to determine whether clients demonstrated higher levels of interpersonal mastery over time. Secondly, this dissertation explores the impact of therapist expressive statements on clients’ narratives, using a lag
sequential analysis. Clients' statements were examined to determine whether higher levels of interpersonal mastery were exhibited following higher-level expressive techniques versus other therapist statements (i.e., supportive statements).

Statistical analyses pertaining to the first research question did not reveal significant changes in interpersonal mastery over the course of therapy. However, graphical analyses suggested specific patterns of gains in interpersonal mastery during SET.

With respect to the second research question, results demonstrated therapists employed significantly more higher-level expressive techniques in the later stages of SET, in accordance with the guidelines provided in SET manuals. Lag sequential analyses did not, however, provide substantial evidence of gains in interpersonal mastery following higher-level therapist techniques. Despite a lack of evidence supporting a general link between higher-level techniques and increased client mastery, exploratory analyses suggested change-focused expressive statements were linked to fewer client statements reflecting low interpersonal mastery. Future research should examine (1) change-focused statements as potentially important variables fostering improvement, and (2) moderators of client responses to higher-level techniques.
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# Table of Contents

Title Page......................................................................................................................... i
Abstract............................................................................................................................ ii
Acknowledgements .......................................................................................................... iv
Table of Contents............................................................................................................... v
List of Tables...................................................................................................................... vii
List of Figures................................................................................................................... ix
List of Appendices............................................................................................................ xi
Dedication ......................................................................................................................... xii

Project Overview ............................................................................................................ 1

Literature Review ............................................................................................................ 7
  Section 2.1: The Nature and Treatment of Internalizing Disorders in Adolescents........ 9
  Section 2.2: A Potential Treatment for Adolescents with Internalizing Disorders.......... 20
  Section 2.3: An Introduction to the Mechanisms of Change in Psychotherapy............. 31
  Section 2.4: The Role of Therapist Techniques in SET .............................................. 35
  Section 2.5: The Role of Client Factors in SET ......................................................... 45
  Section 2.6: The Use of Sequential Analyses in Examining Therapist-Client
  Interactions....................................................................................................................... 52

Study Hypotheses ........................................................................................................... 57
  Research Question 1....................................................................................................... 57
  Research Question 2....................................................................................................... 58

Methods ......................................................................................................................... 62
  Setting ........................................................................................................................... 62
  Participants .................................................................................................................... 62
  Procedure ....................................................................................................................... 64
  Data Analysis Plan ....................................................................................................... 73

Results ............................................................................................................................. 81
Tables

TABLE 1  The Supportive and Expressive Techniques Described by Luborsky (1984) and Book (1998) .................................................................................................................................................. 161

TABLE 2  The Levels and Scores of the Mastery Scale ................................................................. 162

TABLE 3  The Categories of the Modified Therapist Intentions List ........................................ 163

TABLE 4  Diagnoses of the Participants ...................................................................................... 165

TABLE 5  Ranges, Means, and Standard Deviations of the Codable Statements in
Transcripts ..................................................................................................................................... 166

TABLE 6  Ranges, Means, and Standard Deviations of the Uncodable Statements in
Transcripts ..................................................................................................................................... 167

TABLE 7  Ranges, Means, and Standard Deviations of Subscales of the Vanderbilt
Psychotherapy Process Scale ...................................................................................................... 168
Figures

FIGURE 1  Total Scores on the Vanderbilt Psychotherapy Process Scale for each Client-Therapist Dyad, at Sessions 5 and 15 ................................................................. 169

FIGURE 2  Client Scores on the Beck Depression Inventory, Pre- and Post-Therapy ..................................................................................................................... 170

FIGURE 3  Pre- and Post-Therapy Scores on the Beck Depression Inventory for Clients Undergoing Supportive-Expressive Therapy in the Present Study Versus Clients Undergoing Interpersonal Psychotherapy in the Study by Mufson et al. (2004) ..................................................................................................................... 171

FIGURE 4  Client Scores on the Multidimensional Anxiety Scale for Children, Pre- and Post-Therapy ..................................................................................................................... 172

FIGURE 5  Pre- and Post-Therapy Scores on the Multidimensional Anxiety Scale for Children for Clients Undergoing Supportive-Expressive Therapy In the Present Study Versus Clients Undergoing CBT, Relaxation Training, or Study Skills Training in the Study by Rice (2008) ..................................................................................................................... 173

FIGURE 6a  Percentage of High-Level Mastery Scale Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15 ............... 174

FIGURE 6b  Percentage of Low-level Mastery Scale Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 1 ............... 175

FIGURE 7a  Percentage of High-Level Therapist Intentions List Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15 ..................................................................................................................... 176

FIGURE 7b  Percentage of Low-Level Therapist Intentions List Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15 ..................................................................................................................... 177
FIGURE 8a Scatterplot of Mean Mastery Scale Scores Versus Mean Scores on the Therapist Intentions List ........................................................................................................178

FIGURE 8b Scatterplot of the Percentage of High-Level Mastery Scale Scores Versus the Percentage of High-Level Scores on the Therapist Intentions List ........................................................................................................179

FIGURES 9a to j Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy, Session 5, Session 10, and Session 15 .................................................................180

FIGURE 10a Percentage of 3L Mastery Scale Codes for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15 .................................190

FIGURE 10b Percentage of 3L Mastery Scale Scores for Each Client in Early Versus Late Therapy Sessions .........................................................................................................................191

FIGURE 11a Percentage of 5Q Mastery Scale Codes for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15 .................................192

FIGURE 11b Percentage of 5Q Mastery Scale Scores for Each Client in Early Versus Late Therapy Sessions .........................................................................................................................193

FIGURE 12a Percentage of Therapist Intentions List Codes of 7 for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15 .................................194

FIGURE 12b Percentage of High-Level Mastery Scale Scores following Therapist Intentions List Supportive Codes and Codes of 7, for each Client-Therapist Dyad .........................................................................................................................195

FIGURE 12c Percentage of Low-Level Mastery Scale Scores following Therapist Intentions List Supportive Codes and Codes of 7, for each Client-Therapist Dyad .........................................................................................................................196
Appendices

APPENDIX A  Instructions for the Clasuring of Transcripts  ...........................197

APPENDIX B  Mean Therapist Intention Scores and Client Mastery Scores for
Each Session: Pre-Therapy, Session 5, Session 10, and Session 15 ..............199

APPENDIX C  Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in
Each Session: Pre-Therapy, Session 5, Session 10, and Session 15 ............209

APPENDIX D  Proportions of High-, Mid-, and Low-Level Therapist Intentions
Codes in Each Session: Pre-Therapy, Session 5, Session 10, and
Session 15 ........................................................................................................219
Dedication

For all the kids whose minds keep them trapped in a living nightmare. There are others like you who have made it to the other side, and we’re working on paths to help you find your way.
Chapter 1

Project Overview

Among young Canadians 15 to 24 years old, the prevalence of depressive and anxiety disorders is 6.4% and 6.5%, respectively (Nguyen, Fournier, Bergeron, Roberge, & Barrette, 2005). Mental health professionals currently offer various, beneficial interventions for adolescents suffering from these debilitating conditions. Many psychotherapeutic approaches, including psychodynamic psychotherapy, have been empirically studied and found to foster significant improvements in clients with clinically significant depression and/or anxiety (e.g., Shapiro, Rees, Barkham, Hardy, Reynolds, & Startup, 1995; Milrod, Leon, Busch, Rudden, Schwalberg, Clarkin, Aronson, Singer, Turchin, Klass, Graf, Teres, & Shear, 2007; Crits-Christoph, Connolly, Azarian, Crits-Christoph, & Shappell, 1996). While the latter research has disproportionately focused on adult clients, results have followed similar trends in the study of adolescents (e.g., Cartwright-Hatton, Roberts, Chitsabesan, Fothergill, & Harrington, 2004; Rossello & Bernal, 1999; Christogiorgos, Stavrou, Widdershoven-Zervaki, & Tsiantis, 2010; Horn, Geiser-Elze, Beck, Hartmann, Stefini, Victor, Winkelmann, & Kronmuller, 2005; Kazdin, 1990).

Although psychotherapy is considered an effective treatment for young people with depressive and anxiety disorders, it does not always result in the desired improvements. Even when the therapy is useful, clinicians and mental health researchers lack a comprehensive understanding of how the therapy sessions and the therapists who lead them foster meaningful change (Kazdin, 2007; Leichsenring & Leibing, 2007; Lambert, 2004). In order to provide efficient and effective mental health services, and to better understand why some clients do and others do not benefit from certain interventions, a
thorough understanding of the psychotherapeutic process is critical. Some authors believe there is a pressing need to provide better services to adolescents with internalizing disorders (Tishby, Raitchick, & Shefler, 2007), due to the severity and persistence of potential adverse effects as well as the great number of youth affected (Abela & Hankin, 2008).

The specific therapeutic modality being studied in this thesis is Luborsky’s (1984) Supportive-Expressive Therapy (SET), a brief psychodynamic intervention. As will be further discussed in Chapter 2, the effectiveness of SET has been studied quite extensively in adults suffering from psychological disorders, yet its use with adolescents has rarely been discussed in the literature. Prior to examining the main research questions, the current study provides preliminary data regarding the effectiveness of SET with depressed and/or anxious youth. The depressive and anxiety symptoms of 10 adolescents were measured pre- and post- therapy, and analyzed using statistical tools to detect significant changes following treatment.

Although the current study presents data supporting the use of SET with adolescents experiencing internalizing disorders, the core purpose of the study was to better understand the specific client factors and therapist factors theorized to promote change in psychodynamic psychotherapy. The study focused on two factors: client interpersonal mastery and therapist expressive techniques. Micro-level analyses were conducted to improve our knowledge of how client interpersonal mastery changes over time, and in relation to therapist expressive techniques. As mentioned above, clinicians and mental health researchers currently lack a thorough comprehension of what makes psychotherapy effective. This thesis contributes to our knowledge in this field by examining some of the factors believed to be important in promoting change.
With respect to the client, interpersonal mastery is studied as an important element in the psychodynamic model of therapeutic change. Interpersonal mastery has been defined as one’s capacity for self-understanding, emotional self-control, and emotional strength in relationships (Grenyer, 2002). The construct is rooted in psychodynamic theory, although the goal of attaining mastery over problems is common to all psychotherapies (Liberman, 1978; Grenyer, 2002). To date, there have been few attempts to empirically study interpersonal mastery, even though similar concepts have arguably been studied in the literature. It is only recently that interpersonal mastery has been defined in a manner amenable to empirical study (Grenyer, 2002),¹ and preliminary research suggests interpersonal mastery might mediate improvements in clients’ presenting symptoms (Grenyer & Luborsky, 1996; Grenyer, 2002). Further research in this area is necessary to improve our understanding of this construct and its role in the psychotherapeutic process.

With respect to therapist factors, the techniques used by SET therapists are examined in the chapters to follow, and the relationship between therapist techniques and client progress is investigated. According to some psychodynamic theorists, therapists’ statements fit into two main categories: expressive (or interpretive) statements, and supportive (or non-interpretive) statements (e.g., Luborsky, 1984; Ogrodniczuk & Piper, 1999). Expressive techniques involve the use of direct, perceptive statements, while supportive techniques are gentler interventions, involving the use of reflective statements, sympathetic comments, and attentive questioning.

Expressive interventions are theorized to be the active therapeutic ingredients in

¹ Grenyer’s (2002) work was pivotal in the advancement of research on the construct of mastery due to his introduction of an operationalized definition of “interpersonal mastery.” Additionally, based on his definition, Grenyer (2002) designed the Mastery Scale, an objective measure for the assessment of varying degrees of interpersonal mastery. The Mastery Scale and its use in research is further discussed in Chapters 2 and 3.
psychodynamic psychotherapy, fostering increased client insight and improved client functioning (Barber, Crits-Christoph, & Luborsky, 1996). Although a number of therapist interventions have been studied in the literature (reviewed in Beutler, Malik, Alimohammed, Harwood, Talebi, Noble, & Wong, 2004), few of the key interventions used in brief psychodynamic psychotherapy have been thoroughly or empirically investigated (Barber, Sharpless, Klostermann, & McCarthy, 2007; Barber et al., 1996; Spiegel & Hill, 1989). One exception is the use of therapist interpretations (an expressive technique), which have been researched quite extensively (Beutler et al., 2004). Empirical studies have often found the use of therapist interpretations to be linked, sometimes strongly, to positive client outcomes (Beutler, et al., 2004). In the present study, particular attention was given to expressive techniques, including interpretations, which are purported to be the more potent techniques in psychodynamic psychotherapy (Barber et al., 2007; Beutler et al., 2004; Barber et al., 1996; Bibring, 1954).

Although quantitative studies have been conducted to examine the process of change in psychodynamic psychotherapy, the breadth of such research has been limited. One reason pertains to well-documented difficulties associated with operationalizing and measuring specific elements of psychodynamic psychotherapy (Lambert et al., 2004). Moreover, it appears that the complex, multi-factorial nature of the psychotherapeutic process has deterred researchers from further investigating the role of therapist interventions in fostering positive outcomes. Group outcome designs and conventional process-outcome designs have been conducted, yet these methodologies are limited in the extent to which they can reveal how therapy helps clients improve (see Jones, Ghannam, Nigg, & Dyer, 1993; Goldfried & Wolfe, 1998; Maione & Chenail, 1999; Edwards, Dattilio, & Bromley, 2004; Dattilio, Edwards, & Fishman, 2010). These traditional designs do not have
the capacity to capture the nuances of how therapist and client variables might transform throughout therapy and relate to client improvement. In contrast, microanalytic methodologies have been described as promising in their ability to investigate the role of certain therapist-client interactions in promoting client change (Maione & Chenail, 1999). The current thesis addressed the limitations of prior research by using sequential analysis, which offers the possibility of obtaining a more detailed understanding of how therapist techniques help clients improve in psychodynamic psychotherapy.

To review and clarify, the specific objectives of the present study were as follows. In light of our limited understanding of interpersonal mastery, the first objective of this thesis was to investigate the notion that clients develop increased interpersonal mastery over the course of brief psychodynamic psychotherapy. In order to achieve this goal, client narratives in SET were tracked and analyzed to determine whether increased levels of interpersonal mastery could be observed over four points in time (pre-therapy, session 5, session 10, and session 15). The second objective of the study was to investigate the link between particular therapist techniques and client progress. More specifically, the study used a sequential analysis to test the assertion that therapist expressive techniques are particularly important in promoting client improvement. This analysis involved the use of contingency table analyses to explore on a microprocess level whether expressive therapist techniques bring about higher levels of client interpersonal mastery. In contrast to previous research, the present study offers an in-depth examination of the statements exchanged between therapists and clients over the course of psychotherapy, using sequential methods and a longitudinal design.

In conclusion, the present study sought to contribute to our understanding of the therapeutic process by using a unique methodology to study client factors and therapist
factors theorized to foster change in SET. The results offer a better appreciation of how client interpersonal mastery changes over the course of therapy, and in response to therapist expressive techniques. In addition to its unique methodology and its pioneering investigation of interpersonal mastery, the present thesis focused on an adolescent population, which has received little attention in the literature pertaining to SET and the mechanisms of change in psychodynamic psychotherapy (Tishby et al., 2007). Ultimately, the study of promising psychotherapies and the specific factors involved in client improvement aids the broader goals of providing more efficient and effective mental health services to people suffering from anxiety and depression.
Chapter 2

Literature Review

As explained in Chapter 1, the present study is, at its core, an investigation of particular client and therapist factors theorized to foster change in Supportive Expressive Therapy. The main research questions address ways in which client interpersonal mastery changes over the course of therapy and in response to therapist expressive techniques. In addition to the study’s main focus, a number of peripheral, yet important, questions are addressed in the present research. For example, through the use of unique, micro-analytic tools, the present study explores the benefits of alternate methodologies in empirical research about the psychotherapeutic process. This study is also the first independent investigation of interpersonal mastery since Brin Grenyer and his research group published introductory articles on the construct (Grenyer, 1994; Grenyer & Luborsky, 1996; Grenyer, 2002). Moreover, the present study provides an interesting, preliminary analysis of the effectiveness of SET in the treatment of adolescents with internalizing disorders. Taken as a whole, the information gained in answering the main and peripheral research questions will be important in promoting useful psychotherapy research and useful treatments for internalizing disorders.

The purpose of Chapter 2 is to offer the reader background information about the main research questions and the peripheral questions addressed by the study, as well as to establish with greater clarity the need for the current research. The chapter begins with a broad focus, describing the nature and treatment of internalizing disorders in youth. In the

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2 Brin Grenyer is the researcher who defined and operationalized the construct of interpersonal mastery. With his research group, he began studying the construct in relation to the process of client change in psychotherapy.
first section (2.1), the case is made that depressive and anxiety disorders affect young suffers by obstructing their ability to establish healthy relationship patterns during their formative years. Despite the availability of beneficial treatments, there is a need for additional, relationally-focused interventions for adolescents who suffer from these conditions (Abela & Hankin, 2008; Tishby et al., 2007). Section 2.2 describes the key elements of SET, and explains its value as a relationally-oriented intervention for adolescents suffering from depression and/or anxiety.

The remaining sections in Chapter 2 review the literature with a narrower focus on the main research questions; that is, they summarize relevant information about the process of change in psychotherapy. Section 2.3 provides an introduction to the literature on the mechanisms of psychotherapeutic change. In this section (2.3), it is argued that more research is required to understand the role of therapist techniques in the process of change. Moreover, section 2.3 demonstrates that few studies have adopted a micro-analytic approach in examining the process of change, despite the potential usefulness of this method.

Sections 2.4 and 2.5 provide more detailed information on the mechanisms of change in psychotherapy, focusing on therapist factors and client factors, respectively. These sections discuss the literature on therapist expressive techniques and client interpersonal mastery, the two variables being studied in depth in the present thesis. As revealed in sections 2.4 and 2.5, the evidence to date suggests that therapist expressive techniques (Barber et al., 1996) and client interpersonal mastery (Grenyer & Luborsky, 1996) likely play an important role in promoting recovery from internalizing disorders.

Chapter 2 concludes with section 2.6, which further discusses the use of sequential analyses in examining therapist-client interactions. Despite the limited use of such
methodologies in the study of the psychotherapeutic process, there is evidence that sequential analyses can assist researchers in teasing apart the relationship between the techniques employed by therapists and clients’ moment by moment changes in behaviour and verbal utterances. Based on their capacity to examine in-session factors involved in therapeutic change, sequential analyses were incorporated into the methodology of the present study.

Section 2.1: The Nature and Treatment of Internalizing Disorders in Adolescents

Due to the study’s focus on young people with internalizing disorders, this section considers the nature of depression and anxiety in adolescence, with a focus on the social difficulties typically linked to these conditions. The section then reviews three common treatments for adolescent depression and anxiety, demonstrating that despite their merits, these treatments are far from being a panacea in helping adolescent clients. I conclude that further research is important to expand the range of helpful interventions available to depressed and anxious adolescents, as well as to elucidate the factors necessary to promote change.

Internalizing disorders are common among adolescents and young adults. Each year, more than a quarter million young Canadians 15 to 24 years old suffer from clinically significant depression, while about the same number suffer from clinically significant anxiety (Statistics Canada, 2002). Across countries and cultures, a gender disparity has been observed such that, by adolescence, internalizing disorders affect about twice as many females as males (discussed in Abramson, Moffitt, Silva, & McGee, 1998). The suffering and impaired functioning caused by these disorders is extensive. Often, depression and
anxiety disorders can derail a young person’s developmental trajectory, due to their recurrence and/or persistence into adulthood (Biederman, Rosenbaum, Bolduc, Faraone, & Hirshfeld, 1991; Birmaher, Ryan, Williamson, Brent, Kaufman, Dahl, Perel, & Nelson, 1996; Harrington, Fudge, Rutter, Pickles, & Hill, 1990; Rapee & Barlow, 1993). The effects of these conditions can also be tragic, with about 50% of adolescents diagnosed with Major Depressive Disorder attempting suicide at some point in their lives (Brent, Perper, Moritz, Baugher, & Allman, 1993). Given the large number of people suffering from internalizing disorders over extended periods of time, and the potential for grave outcomes, there is a pressing need to develop effective and lasting interventions which can be provided early in life.

In addition to the emotional suffering typically accompanying internalizing problems, depression and anxiety disorders involve a range of other symptoms, such as difficulties in the academic, occupational, and/or social domain (American Psychiatric Association, 2000). Although social and relational difficulties might not be considered classic characteristics of those with depression and/or anxiety, they are noteworthy areas of weakness associated with these conditions.

**The Link Between Internalizing Disorders and Social Difficulties.** The importance of supportive relationships to psychological well-being has been well established (Lincoln, Chatters & Taylor, 2005; Kawachi & Berkman, 2001). In particular, the literature on anxiety and depression has clearly demonstrated the connection between internalizing problems and interpersonal difficulties (Mufson & Moreau, 2004), and the link appears to be bidirectional (Rudoph, Flynn, & Abaied, 2008).

In relation to the pediatric population, empirical research shows that social difficulties are tenacious, persisting over long periods of time. For example, children identified as
socially withdrawn in middle school are more likely to report feelings of social incompetence in adolescence (Morison & Masten, 1991). Further research has shown that social withdrawal in children predicts a wide range of internalizing symptoms during adolescence (e.g., loneliness, depression, negative self-worth regarding social competence, feelings of not belonging to a peer group, and parental reports of internalizing problems; Rubin, 1993; Rubin, Chen, McDougall, Bowker, & McKinnon, 1995).

In their review of the literature on peer relationships in childhood, Rubin, Coplan, Nelson, and Lagace-Seguin (1999) concluded that rejected youth who are timid or withdrawn tend to internalize their interpersonal setbacks and perceive themselves as less competent regarding social abilities. The authors suggested that, with respect to timid children, peer rejection should be a “red flag” for later adverse psychological outcomes such as depression. A related study by Williams et al. (2001) investigated cognitive reactivity, a characteristic trait of anxiety and depression (Segal et al., 1999; Taylor & Ingram, 2000). The results indicated a significant association between the absence of intimate relationships in adolescents and cognitive reactivity (Williams et al., 2001).

The literature on depression strongly suggests depressed individuals experience greater social setbacks. For example, studies have repeatedly shown depressed people receive more negative social evaluations (Hammen and Peters, 1978; Sacco, Milana, & Dunn, 1985; Strack & Coyne, 1983; Winer, Bonner, Blaney, & Murray, 1981). Not only do depressed people receive more negative social evaluations, but they themselves have been observed to have more dismal outlooks on their social behaviour than non-depressed individuals (Clark, Beck, & Alford, 1999; Beck, 1967). A dismal outlook, combined with negative social evaluations would undoubtedly affect one’s capacity to form meaningful [11]

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3 Cognitive reactivity refers to the ease with which negative cognitions come to mind following a mild stressor (Phillips, 2010).
Interpersonal difficulties are as closely linked to anxiety disorders as they are to depression. This is not surprising given the high comorbidity rates – as high as 80% – between anxiety and depression (Birmaher et al., 1996). Numerous authors have discussed the relationship between childhood anxiety, considerable impairments in peer relationships, and overall social competence (Dadds & Barrett, 2001; Kashani & Orvaschel, 1990; Messer & Beidel, 1994; Strauss, Frame & Forehand, 1987). Anxious children are also more likely to exhibit maladaptive relational patterns with their parents, such as excessive dependence on parents in social situations (Dadds & Barrett, 2001). Further research has been conducted to elucidate the mechanisms underlying these social difficulties. A study of children with various anxiety disorders (separation anxiety, overanxious disorder, and social phobia) suggested these difficulties arise from cognitive distortions pertaining to others’ intentions (Barrett, Dadds, & Rappee, 1996). In this study, anxious children made more negative interpretations of others’ motives when presented with ambiguous social scenarios.

It is significant to note that interpersonal stressors have been found to affect adolescent females to a greater extent than adolescent males. Research indicates that stressful events are more likely to be caused by interpersonal issues (especially with family and peers) for adolescent girls, in contrast to their male counterparts (discussed by Laursen, 1996). Further research has provided insight into the reasons underlying the gender divide. For example, Laursen (1996) found that girls experienced a heightened awareness of friendship conflicts than boys, and that friendship conflicts occurred more often during adolescence. With respect to symptoms of internalizing disorders, the relationship between depressive symptoms and negative interpersonal events has been found to be significantly stronger for girls versus boys (Gore, Aseltine & Colten, 1993; Rudolph & Hammen, 1999;
Siddique & D’Arcy, 1984; Wagner & Compas, 1990; Windle, 1992). The latter results indicate that relationship conflicts are more likely to underlie depression in females.

The connection between internalizing disorders and interpersonal difficulties is undeniable, and researchers suggest they are inextricably linked (Rubin et al., 1999; Morison & Masten, 1991; Sacco, Milana, & Dunn, 1985). Some theorists believe it is sufficient to treat internalizing disorders by helping clients resolve interpersonal difficulties (Luborsky, 1997; Mufson & Moreau, 2004). Nonetheless, few treatments for anxiety and depression involve a primary focus on relational difficulties.

_Treatments for Adolescent Mood and Anxiety Disorders._ Among the most commonly cited treatments for adolescent depression are pharmacotherapy (PHT), Cognitive Behaviour Therapy (CBT) and Interpersonal Psychotherapy for Adolescents (IPT-A) (Kazdin & Weisz, 2003; Carr & Boyd, 2003). Below, the research evaluating each of these treatments will be briefly reviewed. While each of these treatments demonstrates clinical value, a case will be made below for the development of the services available to adolescents with internalizing disorders.

_Pharmacotherapy (PHT)._ In relation to the treatment of pediatric depression, research examining the newer antidepressants – selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) – has yielded support for their clinical utility; however, the results do not suggest medications provide a universal solution to internalizing disorders. Indeed, the pediatric PHT literature currently emphasizes the combination of PHT and psychotherapy, as the most favourable outcomes are obtained when the approaches are combined (e.g., March, Silva, Petrycki, Curry, Wells, Fairbank, Burns, Domino, McNulty, Vitiello, & Severe, 2004).

Although SSRIs are commonly used as a first-line treatment for internalizing
disorders, results of some meta-analyses indicate small effect sizes. For example, Jureidini et al. (2004) meta-analyzed randomized controlled trials of newer antidepressants for depressed youth, revealing a small effect size (0.26) for the treatment of depression. A similar effect size (0.25) was calculated by a separate meta-analysis (Bridge, Iyengar, Salary, Barbe, Birmaher, Pincus, Ren, & Brent, 2007). Researchers have also written about the serious side effects of antidepressants, such as increased suicidal ideation and suicidal events, which seem to affect a small, yet noteworthy, percentage of depressed youth (Bhatia & Bhatia, 2007; Cohen, 2008; Garland, 2004; Jureidini et al., 2004; Whittington et al., 2004). While some of the randomized controlled studies do not describe serious adverse events among participants (Emslie et al., 2002; Keller, Ryan, Strober, Weller, McCafferty, & Hagino, 2001), others reveal a significantly higher number of serious side effects in the experimental group (Jureidini et al., 2004). Moreover, various authors describe fluoxetine as the only antidepressant with adequate research evidence for use in the pediatric population (Bridge et al., 2007; Committee on Safety of Medicines / Medicines and Healthcare Products Regulatory Agency, 2003; U.S. Food and Drug Administration, 2003; Whittington et al., 2004). Other authors are of the opinion that psychosocial treatments for pediatric depression are simply “safer and more effective” (Jureidini et al., 2004).

Much research has also investigated the use of SSRIs (and SSNIs) in the treatment of pediatric anxiety, with robust findings demonstrating its effectiveness (Bridge et al., 2007; Walkup, Albano, Placentini, Birmaher, Compton, Sherrill, et al., 2008; Thomsen et al., 2001). A meta-analysis reported medium effect sizes – 0.48 and 0.69 – for the treatment of obsessive-compulsive disorder and “other” anxiety disorders, respectively. As with the PHT literature on pediatric depression, the literature on pediatric anxiety currently highlights the
benefits of combining PHT with psychotherapy (e.g., Pediatric OCD Treatment Study Team, 2004).

However, even though research has yielded positive findings regarding the treatment of anxious children with SSRIs, approximately 4 in 10 pediatric clients do not benefit from pharmacotherapy (Bridge et al., 2007; Keeton & Ginsburg, 2008). Furthermore, concerns regarding adverse effects are discussed in the literature on pediatric anxiety as well as in the research on pediatric depression. Based on results from various studies, a large percentage of anxious youth (17% to 50%) have been found to experience psychiatric adverse events (i.e., agitation) in response to SSRIs (discussed in Wilens et al., 2003). Other documented side effects include disturbances in mood (e.g., irritability), insomnia, weight loss, and suicidality (Hammad, Laughren, & Racoosin, 2006; March, Biederman, Wolkow, Safferan, Mardekian, Cook, Cutler, Dominguez, Ferguson, Muller, Rieseberg, Rosenthal, Sallee, Steiner, & Wagener, 1998; March, Entusah, Rynn, Albano, & Tourian, 2007; Reinblatt & Riddle, 2007; Wagner, Berard, Stein, Wetherhold, Carpenter, Perera, Gee, Davy, & Machin, 2004; Wilnes et al., 2003).

Cognitive-Behavioural Therapy (CBT). CBT is a structured therapeutic intervention aimed at altering the maladaptive behaviours and cognitions underlying psychopathology. In early sessions, clients learn to identify their feelings, thoughts, and behaviours, and begin to recognize the connections between them. Therapists then help clients learn problem-solving skills and cognitive restructuring techniques. The effectiveness of CBT in adolescents with internalizing disorders has been extensively studied, with favourable findings (Albano & Kendall, 2002; Cartwright-Hatton, Roberts, Chitsabesan, Forthegill, & Harrington, 2004; Herbert, Gaudino, Rheingold, Moitra, Myers, Dalrymple, & Brandsma, 2009; Domino, Burns, Silva, Kratochvil, Vitiello, Reinecke, Mario, & March, 2008; Rossello,
Bernal, & Rivera-Medina, 2008).

Despite the overall evidence that CBT is an efficacious treatment (Lambert, 2004), CBT cannot be considered a panacea vis-à-vis internalizing disorders. For instance, not all studies have reported CBT to be efficacious (Treatment for Adolescents with Depression Study Team, 2004; Clarke, Hornbrook, Lynch, Polen, Gale, O'Connor, Seeley, & Debar, 2002; Vostanis, Feehan, Grattan, & Bickerton, 1996; Reynolds & Coats, 1986). Moreover, a substantial percentage of depressed youth may continue to experience considerable symptoms and functional impairment after a typical period of treatment (12 to 18 weeks; Abela & Hankin, 2008). In a study by Lewinshon, Clarke, Hops, and Andrews (1990), over 50% of depressed adolescents continued to meet criteria for a depressive disorder following CBT. Similarly, in another study, more than 50% of adolescents sought further treatment after receiving CBT (Brent, Kolko, Birmaher, Baugher & Bridge, 1999).

The literature on CBT has further limitations, some of which pertain to the generalizability of findings. CBT research has been criticized for reflecting treatment under optimal conditions, as opposed to typical conditions. For example, clients with comorbid conditions are not adequately represented in the research (discussed in Cartwright-Hatton et al., 2004). It is estimated that 30% to 80% of adolescents with depression have a comorbid anxiety disorder (Birmaher et al., 1996). With respect to adolescents receiving treatment in clinical settings, estimates suggest that 74% of depressed clients have comorbid diagnoses. In contrast, CBT efficacy trials tend to have a much lower proportion of clients (20% to 40%) with comorbid diagnoses (e.g., Brent, Holder, Birmaher, Baugher, Roth, Iyengar, & Johnson, 1997; Rohde, Clarke, Lewinsohn, Seeley, & Kaufman, 2001), and CBT researchers have acknowledged that clients with comorbid anxiety and depression are more likely to have a poor treatment response (Brent, Kolko, Birmaher, Baugher, Bridge,
Roth, & Holder, 1998; Clarke, Hops, Lewinsohn, Andrew, Seeley, & Williams, 1992). It has been recommended that further research on CBT should examine its efficacy in community settings, with a more diverse client sample (Abela & Hankin, 2008).

Another potential concern relates to the maintenance of gains attained through CBT. While the research on CBT for depressed adults indicates maintenance of gains post-therapy, the effect of CBT on relapse and recurrence rates has not been determined regarding the adolescent population (Abela & Hankin, 2008). Although few studies have examined long-term outcomes in depressed or anxious adolescents, those that have been conducted suggested a high potential for relapse (Lewinsohn et al., 1994) and long-term outcomes similar to control groups (Birmaher et al., 1996).

Although CBT appears to be a useful treatment for many adolescents with internalizing disorders, experts describe CBT treatments for depressed youth as “clearly not good enough” (Abela & Hankin, 2008, p.199), especially given the prevalence of depression in adolescence, and its impact on young people’s developmental trajectory (Carr & Boyd, 2003). More research on CBT is required to develop a better understanding of when and how CBT is helpful to adolescents. It is also crucial to study additional, promising treatments which could reduce the risk relapse and enhance young people’s prognosis. Due to the strong connection between internalizing disorders and interpersonal difficulties (Rubin et al., 1999; Morison & Masten, 1991; Sacco, et al., 1985), treatments focused on resolving maladaptive relational patterns, like SET, have definite potential. Moreover, from a developmental perspective, deficits in social functioning have a greater impact in the teenage years, and the need to ensure adequate social adjustment is therefore of greater consequence in adolescence. The importance of interpersonal treatments for depressed and anxious adolescents will be further discussed in Chapter 2.2.
Interpersonal Therapy for Adolescents (IPT-A). IPT-A is a brief, structured therapy commonly used to treat adolescent depression (Lambert, 2004; Carr & Boyd, 2003). Unlike many other treatments available to help young people suffering from depression, IPT-A focuses on the maladaptive interpersonal patterns which commonly underlie the presenting symptoms. Indeed, IPT-A theorists believe that, in order to treat depression, it is sufficient to treat the client’s interpersonal problems, regardless of any other predisposing factors (e.g., positive familial history; Moreau, Mufson, Weissman, & Klerman, 1991). In IPT-A, the therapist begins treatment by linking the client’s depressive symptoms to difficulties in one or more of four problem areas: interpersonal deficits, role transitions, interpersonal role disputes, or grief. The therapist facilitates discussion and positive change in the interpersonal area(s).

Many studies suggest that IPT-A is a promising treatment for adolescent depression (Mufson et al., 1994; Mufson & Fairbanks, 1996; Santor & Kusumakar, 2001). However, thus far, few studies have included control groups. One exception is the study by Mufson et al. (1999), which demonstrated greater improvements in depression and social functioning following IPT-A, in contrast to a clinical monitoring control group.

Additional limitations of the research to date involve the exclusion of participants with comorbid psychiatric conditions. As mentioned above, estimates indicate that up to 80% of depressed adolescents have a comorbid anxiety disorder (Birmaher et al., 1996). Therefore, in order for efficacy research to be clinically meaningful, it is important to study clients with comorbid conditions. A recent study addressed this issue by examining the effectiveness of IPT-A for depressed adolescents with a comorbid anxiety disorder (Young, Mufson, & Davies, 2006). The results indicated no significant difference between IPT-A and the non-specific control intervention.
Apart from the issue of comorbid diagnoses, little research has investigated the usefulness of IPT-A for anxiety disorders. One study examined the effectiveness of IPT-A versus supportive therapy in the treatment of social phobia, but no difference was found between the treatments (Lipsitz, Gur, Vermes, Petkova, Cheng, Miller, Laino, Liebowitz, & Fyer, 2008). Furthermore, up to this point, all published research in favour of IPT-A has been conducted by Mufson and Moreau’s research group. In order to confirm the usefulness of IPT-A for internalizing disorders, further studies by diverse research groups are necessary.

In summary, this section has described the ubiquity of anxiety and depression in adolescents, explained the link between internalizing disorders and social difficulties, and discussed the main interventions offered (pharmacotherapy, CBT, and IPT) for these conditions. While these treatments have definite merits, they are not without limitations. Many clients make progress following PHT, CBT, or IPT; however, all clients do not experience substantial, or long-term gains following these interventions. Currently, the literature suggests clients exhibit more favourable outcomes in response to treatment combinations rather than any single approach. Moreover, due to individual differences, particular treatments will be a better option for some clients versus others. In order to maximize the potential for all clients to improve, and for the majority of clients to remain free of internalizing disorders long-term, it is important for therapy research to continue exploring alternate treatments for adolescents. The next section is devoted to discussing one such alternate treatment – SET – as a promising new therapy for adolescents with internalizing disorders.
Section 2.2: Supportive-Expressive Therapy:  
A Potential Treatment for Adolescents with Internalizing Disorders

Supportive-Expressive Therapy (SET) shows potential as an intervention for adolescents suffering from internalizing disorders. This treatment modality has been extensively practiced and studied in the treatment of depressed and anxious adults, with strong positive outcomes. However, despite the attention SET has received in its use with adults, there is essentially no research to date on the practice of SET with adolescents. To my knowledge, only one case study has discussed the use of SET with adolescents, and this article described SET as a valuable therapy for youth (Golombek & Korenblum, 1995). However, as stated by Beamish (2002), “the trend in counseling has been to adapt approaches for the treatment of adults to the treatment of adolescents.” Moreover, as described below, many aspects of SET meet the developmental needs and characteristics of late adolescents. It is therefore surprising that SET has not yet been evaluated as a therapy for young clients.

SET is a brief, manualized, psychodynamic psychotherapy which focuses on the maladaptive interpersonal patterns theorized to underlie mental health difficulties. This psychotherapeutic model shares with IPT-A the underlying assumption that interpersonal difficulties are inextricably linked to mental health symptoms. Yet, even though SET and IPT-A share a similar treatment focus, there are notable differences between the treatments. SET is rooted in psychodynamic principles, which emphasize the lasting effect of childhood experiences on later functioning, the ubiquity of transference, the tendency to repeat and relive traumatic events in the service of mastery, and the powerful influence of unconscious processes over our actions. As in other psychodynamic therapies, SET clients largely
determine the content of the session, by speaking freely about what comes to mind (although SET therapists will focus the client on important aspects of interpersonal relationships). Therapists are taught to help clients feel both nurtured and challenged, through the use of various psychodynamically-oriented techniques, which will be further explained later in this chapter.

In contrast with SET, which is based on psychodynamic principles, IPT-A is rooted in attachment theory and interpersonal theory (Mufson, Dorta, Moreau, & Weissman, 2004), which take into account ethological knowledge about relationships, and emphasize the importance of adaptive communication patterns. IPT-A has a clear focus on current interpersonal issues, while SET allows for the exploration of past relationships, in terms of their influence on present patterns. Moreover, IPT-A sessions are not open-ended. Instead, much of the material is pre-planned. For example, psychoeducation on depression and communication skills is routinely provided during the treatment (Mufson et al., 2004).

Therapist techniques in IPT-A tend to be more explicit in nature (e.g., charting client’s mood symptoms, role playing, and developing of relational strategies) compared to those in SET.

Another important difference between the models relates to the formulation of clients’ interpersonal problems. In IPT-A, therapists determine the focus of a client’s treatment by referring to predetermined categories of common interpersonal difficulties. However, in SET, the focus of the client’s treatment is unique to each person. Therapists determine the treatment focus based on a series of assessment sessions where the client describes conflicts with significant people in his/her life. (A complete overview of the stages of SET is provided later in this section.)

SET has been used with adults who present with a range of psychiatric conditions, and specialized SET manuals have been developed for the treatment of depressive
disorders, generalized anxiety disorder, bulimia nervosa, specific personality disorders, and opiate/cocaine dependence (Leichsenring & Leibing, 2007). A number of randomized control trials (RCTs) have demonstrated the usefulness of SET with these various conditions (e.g., Vinnars, Barber, Noren, Gallop, & Weinryb, 2005). With respect to Generalized Anxiety Disorder, a randomized controlled feasibility study (n = 31) determined that SET and a supportive therapy control group led to equal decreases in anxiety ratings; however, a significantly greater number of SET clients no longer met criteria for an anxiety disorder following therapy (Crits-Christoph, Connolly Gibbons, Narducci, Schamberger, & Gallop, 2005). Open trials have also been conducted, reporting significant improvements with large effect sizes for clients receiving SET for complex depressive disorders (Diguer, Barber, & Luborsky, 1993; Luborsky, Diguer, Cacciola, Moras, Schmidt, & deRubeis, 1996), and personality disorders (avoidant personality disorder or obsessive-compulsive personality disorder; Barber, Morse, Krakauer, Chitams, & Crits-Christoph, 1997).

With its unique focus on resolving maladaptive interpersonal patterns, SET has also been studied in terms of its effect on clients’ interpersonal functioning. Crits-Christoph and Luborsky (1998) found that clients exhibited less pervasive maladaptive relational patterns post-treatment. This change was demonstrated by the content of the clients’ “relationship episodes” – narratives pertaining to interpersonal interactions. At the end of therapy, clients recounted fewer negative reactions during interpersonal encounters (both with respect to themselves and the other person), and more positive reactions (with respect to the other person). Furthermore, these changes in their relationship patterns were associated with symptom relief, suggesting that interpersonal changes might mediate improvements in depression.

Earlier in Chapter 2, the relationship between interpersonal stressors and
psychological difficulties was discussed. It was noted that the link between social stressors and internalizing symptoms was significantly stronger for females versus males (Gore, Aseltine & Colten, 1993; Rudolph & Hammen, 1999; Siddique & D'Arcy, 1984; Wagner & Compas, 1990; Windle, 1992). These findings suggest relationship conflicts are more likely to underlie psychological difficulties in females. Hence, based on this research, and due to SET's focus interpersonal interactions, there is reason to believe SET might have a stronger impact on females. However, the research to date has not studied the effect of gender on clients’ outcomes following SET.

Overall, there is much evidence suggesting that SET is comparable to widely-available treatments for adults with psychiatric disorders. A review of the research on brief psychodynamic psychotherapies concluded that brief psychodynamic psychotherapies such as SET are at least as effective as long-term psychotherapy, cognitive-behavioural therapy, and other brief therapies (Messer, 2001). However, according to the American Psychological Association’s Task Force on Promotion and Dissemination of Psychological Procedures of the Division 12 (Clinical Psychology), a treatment must have at least 2 randomized controlled trials conducted by independent researchers in order to be considered efficacious in a particular psychiatric disorder (Chambless & Hollon, 1998; Chambless & Ollendick, 2001). Thus, despite the findings in favour of SET, a greater number of randomized controlled trials are needed for SET to be formally recognized as an efficacious intervention for particular psychiatric conditions (Leichsenring & Leibing, 2007). Reviewers have also called for more research into the processes underlying SET, such that professionals can have a better appreciation of which processes lead to client gains (Leichsenring & Leibing, 2007).

Despite the extensive study of SET for adults with psychiatric conditions, there is a
dearth of research addressing the effectiveness of SET for depressed and/or anxious adolescents. Only one article addressed the use of SET with the adolescent population. In this study, Golombek and Korenblum (1995) described the value of SET for adolescents (to be discussed in detail later in Chapter 2), and presented a case study documenting the success of SET with a 19-year-old female client.

The young woman followed by Golombek and Korenblum (1995) initially sought treatment due to low mood, bouts of low self-esteem, and interpersonal difficulties, particularly regarding romantic relationships. She was diagnosed as having a depressive disorder N.O.S., and showed traits of an avoidant personality disorder. The authors outlined each stage of the client’s treatment, which mapped closely on to the process outlined in Luborsky’s (1984) SET manual. They described changes in the clients’ perspectives and insights over the course of therapy. In the early stages of therapy, Golombek and Korenblum (1995) noted the client’s developing awareness of her maladaptive behaviours in relationships, and the extent to which they hindered her goals. In these early sessions, the client “made a concerted effort to make some changes in the way she related to others and began to be more open to meeting boys and dating” (Golombek & Korenblum, 1995, p.314). With respect to the later stages of therapy, the authors described the client’s new insights into her distorted perceptions of herself and others, which were followed by changes in thoughts, feelings, and attitudes. A recurring therapeutic difficulty reported by the authors pertained to the client’s inability to engage in conversations about the transference relationship. As Golombek and Korenblum (1995) described the therapy process with this adolescent client, they presented transcribed excerpts of therapy sessions, which illustrated how various elements of SET were executed throughout the therapy.

Golombek and Korenblum (1995) provided an important contribution to the literature
by documenting, for the first time, the use of SET with an adolescent client, and by providing a rationale for the use of SET with adolescents. However, this study had clear limitations due to its methodology. Given that only one client was studied, further research is clearly necessary to examine the effectiveness of SET for adolescents. It is also notable that the authors did not include any quantitative data on the severity of the client’s symptoms, nor did they report objective measurements of the client’s improvement. While the transcribed excerpts provided some information on the benefits of the therapy from the clients’ perspective, it remained uncertain whether these excerpts were representative of the client’s point of view. Golombek and Korenblum’s (1995) explanations of the process and outcome of SET can therefore be criticized as being a subjective analysis of events.

Although Golombek and Korenblum (1995) are the only authors, to date, to study the use of SET with adolescents, Tishby et al. (2007) investigated the use of similar, psychodynamic psychotherapies with adolescent clients. Tishby et al.’s (2007) participants were 11 adolescents with DSM-IV diagnoses of an anxiety, depressive, and/or personality disorder. Clients were offered psychodynamic psychotherapy, based mainly on object relations theory, over a period of 8 to 12 months. The authors investigated the changes in the clients’ relationship patterns throughout the course of therapy, and positive changes in the patterns were documented. A major limitation of Tishby et al.’s (2007) study pertains to the lack of information regarding participants’ symptoms pre- and post- therapy, and whether relational improvements paralleled progress in other aspects of their psychological status. Nonetheless, the results of this study suggest that brief psychodynamic therapy with an interpersonal focus might help adolescents resolve maladaptive interpersonal patterns. Despite the minimal attention SET has received in relation to the adolescents, many aspects of the intervention appear to fit this population. The suitability of SET for adolescents will be
discussed below, following a description of the therapeutic model.

**Overview of SET.** The Core Conflictual Relationship Theme (CCRT) method of practicing SET (for adults) was formalized and manualized through Luborsky's (1984) book entitled *Principles of Psychoanalytic Psychotherapy: A Manual for Supportive-Expressive Treatment*. A second, detailed overview of the CCRT approach was published by Book (1998), i.e., *Understanding Transference: The Core Conflictual Relationship Theme Method*. As described by Luborsky (1984), SET may be practiced either as a time-limited (brief) or a time-unlimited therapy. Most of the empirical research on SET has, however, focused on the time-limited model, and the present research is no exception. Hence, the time-unlimited version will not be specifically discussed below.

When practiced according to the CCRT method, SET involves a number of different phases, taking place over approximately 20 sessions. Prior to the beginning of the therapy sessions, there is an assessment process. As part of this initial process, the therapist and client meet for approximately 3 interviews in which the client is prompted to recount, in detail, recent conflicts he/she has experienced with important people in his/her life. These relationship anecdotes are referred to as Relationship Episodes (REs). Clients are prompted to recount REs pertaining to various significant people in their lives (e.g., parents, friends, siblings, and teachers). As the client recounts REs, the therapist reflects on three aspects of the anecdote: (1) the client’s wishes, desires, and needs in the relationship (Wish; W), (2) the response of the other person in relation to the client’s wish (Response of Other; RO), and (3) the client’s own response in relation to the RO (Response of Self; RS). The RS and RO, which are always considered from the perspective of the client, describe feelings, thoughts, and/or behaviours.

It is recommended that a minimum of 12 REs are recounted by the client during the
assessment phase (Lubosky, 1984). Following the assessment sessions, the therapist reviews all the REs, and mathematically establishes the client’s most frequently described W, RO and RS. From this information, the client’s Core Conflictual Relationship Theme (CCRT) is generated. The CCRT therefore summarizes the client’s “template” for relational interactions, describing the client’s typical approach to satisfying his/her relational needs or drives. The following is an example from Book (1998) of a CCRT for a particular client:

Mr. Black has a Wish (W) to speak up forcefully when wronged or overlooked. However, he experiences others as responding to him vindictively (RO) should he do so. So he bites his tongue, remains silent, and ends up feeling resentful and down on himself (RS; p.22).

The next step in the process of SET is the “socialization interview,” during which the therapist briefly describes the structure of SET to the client. At this time, the therapist also presents the drafted CCRT to the client, who is encouraged to provide feedback regarding the relevance of the CCRT. Together, the therapist and client decide whether modifications to the CCRT should be made. When the client understands the CCRT and agrees with the formulation, the therapy process can begin.

The remainder of the therapeutic process (and the main part of the therapy) generally takes place over 16 sessions. As with other psychodynamic therapies, clients are instructed to speak freely about what is on their mind when they come to session. As described in Luborsky’s (1984) manual, the therapeutic sessions primarily involve the discussion of the patient’s REs. During the first stage of therapy – Phase I – the therapist’s task is to bring up the client’s CCRT when REs are discussed, to help the client recognize the ubiquity of the CCRT in his/her life. The underlying assumption is that greater awareness of the pattern leads to a greater ability to control it.

In phase II of the therapeutic process, the therapist continues to bring up the CCRT
as the client discusses REs. However, the main task of the therapist is to help the client understand the CCRT as a repetition compulsion, or as it is linked to past experiences and relationships. The meanings and consequences of the client’s RS are discussed, and the ways in which the client can actualize his/her wish are explored. Based on the theoretic model, the client typically begins to actualize the wish by changing his/her own automatic, maladaptive RS in relation to his/her perception of the RO.

In the final stage of therapy (Phase III), the therapist and client speak about the upcoming termination, and its impact on the client. Any thoughts and concerns about termination are addressed, and where relevant, the client’s reactions to termination are compared to the CCRT. The therapist and client also discuss changes, insights, and gains that came about over the course of therapy.

*The suitability of SET to the late adolescent population.* In order to successfully conduct psychotherapy with adolescents, it is necessary to have an understanding of the stages of adolescent psychological development and how the characteristic expressions of these stages might impact the therapeutic process (Golombek & Korenblum, 1995). From a developmental standpoint, not all therapeutic modalities would be well suited to younger people, yet various features of SET are compatible with this age group. Due to its relationship focus, SET resonates with adolescents. Moreover, the therapeutic format is time-limited, clearly delineated, and empowering. These factors promote engagement and are crucial in interventions with young people (Golombek & Korenblum, 1995).

Children and young adolescents generally do not have the cognitive resources to manage the in-depth processing of maladaptive interpersonal patterns required in SET. By late adolescence, however, most youth have the capacity for self-understanding and perspective-taking (Selman, 2003; Damon & Hart, 1992), which is necessary to undergo this
type of therapy. Not only are late adolescents better cognitively equipped to engage in SET, but the interpersonal focus of this modality maps on to some of the main developmental tasks of late adolescence: the formation of intimate relationships (Williams, Connolly, and Segal, 2001), and separation-individuation (Blos, 1962; Erikson, 1963).

With respect to relationships, the nature of interpersonal interactions changes tremendously during adolescence. It is during this developmental stage that peer relationships begin to shift, becoming less focused on common activities and more focused on intimacy (Sullivan, 1953; Buhrmester & Furman, 1987; Mufson & Moreau, 2004). Adolescents must adjust to an expansion of the peer group to include persons of the opposite sex, and they must learn how to form romantic relationships. Additionally, adolescents experience increased conflicts with their parents (Galambos, 1992), as they strive to achieve greater autonomy and establish a sense of identity. Amidst all these changes, the desire to conform and to be accepted within the peer group becomes important (Steiner & Feldman, 1996). It is not surprising that most adolescents experience peer conflicts, difficulties with authority figures, and confusion in romantic relationships. For this reason, therapies with an interpersonal focus, such as SET, are a particularly good fit at this stage of development (see Golombek & Korenblum, 1995).

Adjusting to a new interpersonal world is difficult and stressful, yet it is crucial that young people learn to navigate this world successfully. Our early relational experiences develop into relational schemas which can shape the course of interpersonal interactions (Miller and Turnbull, 1986; Snyder, 1984). Indeed, the literature suggests that relational patterns developed during adolescence can persist and affect future relationships (Erikson, 1959; O’Connor, Allen, Bell, & Hauser, 1996). Interventions focused on resolving maladaptive relational patterns can thus be especially important in adolescence, a time
when new relational interactions are taking place, and new relational schemas are forming. The manner in which adolescents resolve challenges in interpersonal relationships can affect the course of their interpersonal lives.

Adolescents are absorbed in the developmental task of forming intimate relationships. At the same time, they are struggling with the task of separation-individuation, trying to become independent human beings with a distinct identity. Golombek and Korenblum (1995) pointed out that, due to their developmental foci, certain types of treatments do not bode well for adolescent clients. According to these authors, open-ended therapies are not well-suited to this age group, due to strong needs for autonomy. Likewise, overly directive therapies would be ill-advised. Based on developmental theory, late adolescents would be intimidated by ongoing, long-term therapies, which implies dependence on an adult. In the following quotation, John Meeks (1986) speaks of the therapist’s role in supporting the young client’s needs: “Individuation, the goal of adolescent development, is best served by assisting the adolescent towards a workable character synthesis and then quickly moving aside so that the adolescent’s strengths propel him towards real and available objects outside of the therapy office. [p.266].”

In SET, the process is long enough to develop a good therapeutic alliance, but not so long that it will foster feelings of regression and dependence (Golombek & Korenblum, 1995). In fact, SET promotes the clients' ability to self-reflect, make decisions, and take ownership of the process and outcome. From the beginning the client is invited to be a partner in guiding the therapy. Together, the therapist and client agree on the main focus of the therapy (the CCRT). The specific format of SET is therefore compatible with the adolescent’s drive toward separation and individuation.

In conclusion, SET appears to be well suited to the treatment of adolescent
depression and anxiety for several reasons. This therapeutic modality is characterized by a focus on the client’s unique interpersonal difficulties, and from a developmental perspective, this focus is especially relevant to adolescents, who are coping with extensive changes in their social world. Moreover, as a brief therapy, which empowers the client and engages the adolescent’s new abstract cognitive abilities, SET respects the adolescent’s inherent desire to be independent and competent in managing his/her life. As stated by Golombek and Korenblum (1995) in reference to adolescent treatments, “[SET] should be considered as an additional effective tool in our overall treatment armamentarium.”

Section 2.3: An Introduction to the Mechanisms of Change in Psychotherapy

As described above, a main goal of the current research is to improve our understanding of the process of change in SET. Chapter 2.3 reviews important aspects of our knowledge about the mechanisms of change in psychotherapy. This literature demonstrates that certain factors common to all psychotherapies (e.g., the therapeutic alliance) have a strong effect on client improvement. However, the research on other process variables is less conclusive. For example, the impact of various therapist techniques on client improvement is still unclear.

Therapeutic ingredients leading to change. The literature on the effectiveness of psychotherapy leads to a consistent, yet baffling conclusion. Based on a large number of studies with diverse and rigorous methodologies, we know that psychotherapy generally results in client improvement, regardless of the particular type of therapy employed (e.g., Luborsky, Singer, & Luborsky, 1975; Smith, Glass, & Miller, 1980; Strupp & Hadley, 1979). Given the varied theories and techniques espoused by clinicians of different theoretical
orientations, the ubiquity of the observed improvements is remarkable.

**Nonspecific ingredients.** Knowing that a range of psychotherapies produce similar results, clinical researchers have been trying to understand which ingredients are responsible for positive changes in clients. Many have pondered whether certain nonspecific elements common to various therapeutic modalities might be largely responsible for client gains. Perhaps the specific techniques characteristic of each modality are not actually essential to therapeutic progress. The latter possibility has been discussed at length in the literature, with conclusions emphasizing the important role of nonspecific factors in psychotherapy (Wampold, 2001; Hubble, Duncan, & Miller, 2010). In fact, it has been estimated that 85% of clients’ improvement in psychotherapy is a function of nonspecific factors, including the therapeutic alliance, expectancy (placebo) effects, and extratherapeutic factors, such as the client’s ability to focus on a problem and the occurrence of fortuitous events (Asay & Lambert, 1999).

Although a range of nonspecific factors have been identified and studied, most of the research on nonspecific factors has focused on the role of the therapeutic alliance, which encompasses the supportive characteristics of the therapist (i.e., accurate empathy, positive regard, warmth, and genuineness). The therapeutic alliance is often described as a collaborative relationship between therapist and client, with elements of cooperation, emotional bonding, and agreement regarding treatment tasks and goals (Andrusyna, Luborsky, Pham, & Tang, 2006).

The findings of the myriad of studies on the therapeutic alliance have indisputably demonstrated the importance of a strong, positive relationship between therapist and client. Indeed, both meta-analyses (Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000) and numerous other studies (Horvath & Bedi, 2002; Orlinsky, Ronnestad, & Willutzki, 2004;
Mallinckrodt, 1993) have found a consistent link between the strength of the therapeutic alliance and the extent to which patients improve following therapy. Moreover, these findings reflect research on various types of psychotherapies, and SET is no exception (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000). The unearthing of this important link by psychotherapy researchers has been described as “an impressive performance for an area of research in which all findings are rarely in the same direction, and rarely all significant” (Luborsky, Crits-Christoph, & Barber, 1991).

The literature examining the timeline of changes experienced by clients also supports the notion that nonspecific factors play a central role in leading to client improvement. This body of research demonstrates that changes in client functioning occur before the therapists begin to use interventions (e.g., cognitive restructuring) theorized to bring about change (Ilardi & Craighead, 1994; Wilson, 1998; Haas et al., 2002).

Despite the importance of nonspecific factors, many studies suggest that specific factors have a stronger capacity to produce therapeutic gains (e.g., Oei & Shuttlewood, 1997; Oei & Shuttlewood, 1996; Jones, Cummings, & Horowitz, 1988). Specific interventions used by the therapist in session – therapist techniques – have also been investigated as agents of therapeutic change. Therapist techniques typically reflect the essence of the theory behind a specific therapeutic model, and therapists spend much of their training developing this type of technical skill. Below, the research on specific therapeutic techniques will be explored from a psychodynamic perspective.

Specific Ingredients. In contrast to the body of research on nonspecific interventions, the research on specific therapist interventions has produced findings that are neither clear, nor consistent. Overall, studies investigating specialized therapeutic techniques have not established a reliable link between the use of such techniques and client outcomes.
(reviewed in Orlinsky et al., 2004; Hubble et al., 1999). The lack of consistent findings has sparked much academic debate regarding the importance of nonspecific versus specific factors (see Barber et al., 1996), and some psychotherapy authors have argued that specific factors such as therapist interventions have little effect on patient outcomes (Hubble et al., 2010; Frank & Frank, 2004; Messer & Wampold, 2002).

Even though the research findings are unclear, it is too early to conclude that therapist interventions are irrelevant to the therapeutic process. Authors such as Piper, Joyce, McCallum, & Azim (1993) have warned that “[therapist] technique should not be prematurely rejected as an important variable.” Indeed, an analysis of the research shows that a richer literature is needed to properly understand the effect of therapist techniques on clients. Most studies to date have taken the approach of exploring relationships between therapist interventions and “macro-outcomes.” Typically, studies have examined the link between the frequency of interventions and client improvement, as determined by pre- and post-therapy ratings of functioning (e.g., Connolly et al., 1999; Diemer et al., 1996; Hill, Zack, Wonnell, Hoffman, Rochlen, Goldberg, Nakayama, Heaton, Kelley, Eiche, Tomlinson, & Hess, 2000; Hoglend, 1996; Milbrath et al, 1999; Ogrodniczuk et al., 2000; Piper, Azim, Joyce, & McCallum, 1991; Piper, Joyce, McCallum, & Azim, 1998; Piper, McCallum, Joyce, Azim, & Ogrodniczuk, 1999a). Moreover, client improvements are generally measured by self-report questionnaires, a type of measurement raising numerous methodological concerns, including threats to internal validity (see McLeod, 2000).

Hence, even though a number of studies have examined the role of therapist techniques in promoting client improvement, the research has been lacking in methodological depth and variety, especially in the area of psychodynamic psychotherapy. Some academics have argued that research should focus more extensively on the dialogue
within therapy sessions, including a more detailed analysis of the specific, potentially curative interactions between therapists and clients (Maione & Chenail, 1999; Hill, 1990).

In summary, it is clear that our understanding of therapist techniques is lagging behind our knowledge about nonspecific factors. In order to gain further insight into the role of specific therapeutic interventions, more micro-analytic research is needed to tease apart the likely nuanced relationship between therapist statements and client progress. With the aim of better understanding the role of therapist techniques in the process of psychotherapy, the present study examines the impact of specific psychodynamic techniques on client progress. To avoid the limitations of previous studies, the current thesis takes a micro-analytic, sequential approach to investigating the relevance of therapist techniques in the process of therapeutic change.

Section 2.4: The Role of Therapist Techniques in SET

Section 2.3 presented a brief overview of the literature on the role of specific and nonspecific factors in psychotherapy. The case was made that, although the importance of nonspecific factors (e.g. the therapeutic alliance) is well recognized, the role of specific factors in psychotherapy (e.g., therapist techniques) is not as well understood. The present section continues to explore the role of therapist techniques on client progress, with a focus on the theory behind SET.

As with other psychotherapies, SET involves nonspecific factors, which are acknowledged to have an essential role, in addition to specific factors, which are believed to
contain the primary ingredients fostering change. In SET, the ‘supportive’ aspects of the therapy can be referred to as the nonspecific factors, while the ‘expressive’ aspects constitute the specific factors.

*What are supportive and expressive statements?* According to Luborsky (1984), therapist statements are believed to lie on a supportive-expressive continuum. Supportive statements, which lie on one end of the continuum, help the client feel safe, respected, validated, and supported (as the name suggests). These types of statements are similar to alliance-building techniques incorporated into the practice of all therapists, regardless of their therapeutic modality. Hence, supportive statements can be regarded as nonspecific factors promoting client change. A complete list of the types of statements considered to be ‘supportive’ is provided in Table 1.

Expressive statements, which lie at the other end of the supportive-expressive continuum, encourage clients to explore their minds and confront difficult issues. Expressive techniques include (1) clarifications, which help elucidate the client’s wishes, feelings, and responses; (2) confrontations, which help raise the client’s awareness of resistances, defenses, or logical inaccuracies; and, (3) interpretations, which draw attention to connections previously unknown to the client. A complete list of the types of statements considered to be ‘expressive’ is also provided in Table 1.

In contrast to supportive statements, which are common to all therapies, the expressive techniques taught in SET are characteristic of the psychodynamic modalities, and SET in particular (Barber et al., 1996). These techniques are theorized to stimulate

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Luborsky (1984) describes the SET therapist’s use of “Supportive Techniques.” In relation to the definitions of nonspecific and specific therapeutic factors, “supportive techniques” would fall in the nonspecific category. However, the reader should be aware that, in the present thesis, “therapist techniques” describe specific factors, i.e., those factors characteristic of the therapeutic modality. Despite Luborsky’s reference to supportive aspects of his therapy as “techniques,” supportive techniques are not classified as specific factors.
reflection, and most importantly, insight (Luborsky, 1984, 1998). In SET, the expressive statements typically focus on the client’s CCRT, while in other psychodynamic therapies expressive statements typically do not focus on a specific, predetermined pattern. As mentioned earlier, based on psychodynamic theory, interpretations (one of the expressive techniques) have been long regarded as a potent factor promoting insight (Blanck, 1966; Freud, 1914/1953; Fromm-Reichman, 1950).

In psychodynamic theory, techniques leading to insight are held in high esteem because insight is believed to be a crucial mediator of change (Luborsky, 1984; Schonbar, 1968). More specifically, it is believed that clients’ suffering is linked to a lack of understanding of their conflicts. Expressive techniques help clients develop insight into maladaptive processes operating unconsciously (Spiegel & Hill, 1989). With new knowledge coming from insights, clients can escape previous, unhealthy patterns, and attain relief from their original difficulties. In SET, insights are believed to help clients alter their CCRT, thereby interacting with other people in a healthier manner, and leading to a resolution of initial symptoms (Barber et al., 1998; Brenner, 1976).

What is the role of the SET therapist? In his introductory SET manual, Luborsky (1984) described in detail the role of the therapist in fostering change. He asserted that therapists should employ a variety of statements lying along the supportive-expressive continuum (Luborsky, 1984, 1998). Supportive statements are particularly important when a client lacks trust in the therapist, or feels hopeless. The supportive aspects of SET provide the client with enough strength to manage the harder, expressive parts. Indeed, clients can find the expressive components of the therapy to be quite challenging and difficult. While expressive techniques are believed to be particularly potent in fostering change, clients must feel secure and supported in order to benefit from them.
In summary, based on Luborsky’s (1984) model of SET, supportive and expressive statements have different purposes, and contribute differently to the therapeutic process. While both are important, expressive techniques are theorized to bring about critical client insights into the CCRT, along with changes in perceptions and actions (Barber et al., 1998; Brenner, 1976). In turn, these insights and changes are believed to result in improvements in symptoms and presenting concerns.

Empirical Research on the Role of Supportive / Expressive Statements in Psychotherapy. A number of studies have looked at the role of particular therapist techniques in SET. However, only one study by Barber et al. (1996) investigated the differential contribution of the various supportive and expressive techniques on client progress. Barber et al. (1996) investigated whether therapists’ use of supportive or expressive techniques was linked to reductions in clients’ depressive symptoms. Taking into account pre-treatment global mental health, Barber et al. (1996) examined the link between the frequency of supportive / expressive statements and outcome. Neither the frequency of supportive statements, nor the frequency of expressive techniques accounted for changes in depression. However, Barber et al. (1996) found that competence in the delivery of expressive techniques predicted improvement in depressive symptoms, where competence was measured based on therapists’ scores on the Penn Adherence-Competence Scale for Supportive-Expressive Therapy (Barber & Crits-Christoph, 1996).

The relationship between competent expressive techniques and client improvement remained significant even when early symptomatic improvement, and nonspecific factors (i.e., therapeutic

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5 The Penn Adherence-Competence Scale for Supportive-Expressive Therapy (PACS-SE) consists of three subscales pertaining to (1) general therapeutic skills (9 items); (2) supportive skills (9 items); and (3) expressive skills (21 items). Scorers rate each item on a 7-point Likert scale measuring therapist skill. The supportive subscale includes items such as “The therapist conveys a sense of respect to the patient” while the expressive subscale includes items like “The therapist focuses attention on similarities among the patient’s past and present relationships.”
alliance, and general therapeutic skills or alliance) were taken into account. Competence in supportive skills was not related to treatment outcome. The authors postulated this difference was due to the particular importance of expressive techniques. Barber et al.'s (1996) findings are therefore important for a number of reasons. Not only do they indicate that therapist competence is important, but they also suggest that well-delivered expressive techniques have a greater impact on treatment outcome than well-delivered supportive statements. The findings provide support for the notion that specific factors (i.e., skills in expressive techniques) are indeed important to client outcomes. A weakness of the study, however, was the low reliability of the supportive technique scale. Thus, replication of the results is especially important.

While only one study (Barber et al., 1996) empirically investigated how all expressive techniques, as a group, impact client outcomes, more studies have examined the impact of one, particular expressive technique, i.e., interpretations. The latter intervention has received much attention due to its historical reputation as the primary ingredient, and the most powerful intervention within psychodynamic psychotherapy (Bibring, 1954; Brenner, 1979; Clarkin, Yeomans, & Kernberg, 1999; Cooper, 1987; Davanloo, 1978; Freud, 1912, 1913, 1914, 1915; Gill, 1982; Klein, 1952; Kohut, 1984; Loewald, 1960; Malan, 1976; Mann, 1973; Sifneos, 1987; Strachey, 1934). Currently, there is no consensus across or within theoretical orientations with respect to how interpretations should be defined (Spiegel & Hill, 1989). However, most agree on one aspect of the definition: when using interpretations, the therapist brings up content which lies outside the client's immediate awareness or consciousness (e.g., Bibring, 1954; Hill, 1985; Luborsky, 1984).

Throughout the history of psychodynamic theory, interpretations have stood the test of time in terms of their status as a potent intervention. The central importance of
interpretations was asserted by Freud during the heyday of classical psychodynamic theory (Freud 1914/1953). Later in history, as relational aspects were purported to play a greater role in client change, interpretations continued to be considered a principal mechanism of change, alongside other factors, such as the therapeutic alliance (e.g. Luborsky, 1984).

Despite the strong theoretical emphasis on the importance of interpretations, the significance of this technique has yet to be substantiated by trends in empirical research. Indeed, Henry, Strupp, Schacht and Gaston (1994) estimated that the ratio of theoretical to empirical articles on the subject is in the range of 500 to 1.

An early, classic study by Malan (1976) investigated the relationship between therapists’ use of transference interpretations and client outcome. The author’s decision to focus on transference interpretations is based on the special role awarded to transference interpretations in psychodynamic writings. Malan’s (1976) results indicated that client outcome was indeed linked to the frequency of therapists’ transference interpretations. Although the study produced interesting findings, it has been criticized for its methodological flaws, including the collection of data from case notes rather than transcripts, the use of a single measure of client outcome, and the evaluation of data by raters who were not blind to client outcome (Piper, Debbane, Bienvenu, DeCarufel, & Garant, 1986). Years after Malan (1976) published his study, a similar project was undertaken by Marziali (1984), who replicated Malan's work, while correcting its main methodological flaws (i.e., data pertaining to the therapists’ interpretations were obtained from audiotaped sessions rather than case notes). The new findings supported Malan’s (1976) results: a positive association was found

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6 Transference interpretations refer to interpretations explicitly addressing the client’s ongoing relationship with the therapist (Hoglend, Amlo, Marble, Bogwald, Sorbye, Sjaastad, & Heyerdahl, 2006).

7 Transference interpretations are theorized to be especially potent because the client is obliged to consider the potential role of fantasy, or unconscious processes in his/her present relationship with the therapist. The real-time nature of the interpretation, which addresses an ongoing interaction, has been described as being especially salient to clients, albeit sometimes anxiety-inducing (Hoglend et al., 2006).
between more favorable outcome and the frequency with which therapist used relevant transference interpretations. In accordance with psychodynamic theory, the replicated results suggest that transference interpretations are an especially important part of psychodynamic psychotherapy.

Despite the promising results of early studies, later scientific research examining the impact of interpretations on client outcomes has produced mixed, and complex findings. A review of the literature on therapist interpretations was conducted by Beutler et al. (2004). The review focused on 10 recent studies, published between 1991 and 2000, which examined the link between interpretations and client outcome. The mean effect size calculated through this research review was non-significant, showing that the combined results of the studies do not support a direct link between frequency of interpretations and client outcome. In fact, only four of these studies established a link between the frequency of therapist interpretations and some aspect of client improvement. These results are consistent with some earlier empirical research on interpretations (Orlinsky & Howard, 1986). However, it is critical to mention that most of the studies reviewed by Beutler et al. (2004) were macroanalytic studies, in that they examined the impact of therapist interpretations on changes in client functioning pre- and post- therapy. For the most part, client improvements were based on ratings on self-report questionnaires. The use of such coarse measures of client change to determine the effect of therapist interpretations can obscure the potential impact of these interventions.

Further empirical research has been conducted in which the authors have made use of more fine-tuned analyses to understand whether particular variables might affect the impact of interpretations on clients. It is widely acknowledged that interpretations might

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8 Connolly et al., 1999; Diemer et al., 1996; Hill et al., 2000; Hoglend, 1996; Milbrath et al, 1999; Ogrodniczuk et al., 2000; Piper et al., 1991; Piper et al., 1998; Piper et al., 1999
result in client stress, due to the unfamiliar, and/or unpleasant nature of the information being disclosed by the therapist. However, certain clients can cope with the challenge offered by interpretations and learn from them. As discussed by Piper et al. (1998), “whether such strain is regarded as mistreatment or as an opportunity for learning and change may depend on the patient’s quality of object relations.” Indeed, some studies have demonstrated that interpretations seem to result in better outcomes for those clients who have higher pre-therapy interpersonal abilities (Schut, 2005; Piper et al., 1998; 1999a), and whose reactions to therapist interpretations tend to be positive (Schut, 2005). However, other research has demonstrated the opposite trend. A recent study found that clients with poor object relations tended to benefit more from transference interpretations (Hoglend, Amlo, Marble, Bogwald, Sorbye, Sjaastad, & Heyerdahl, 2006).

Another line of research has focused on the climate in which the therapist delivers an interpretation, with the underlying assumption being that interpretations delivered in a positive interpersonal context would be more helpful to the client. Work by Piper et al. (1999b) described the likely interplay between therapists and clients when a transference interpretation is not well received. If a client disagrees with a therapist’s interpretation, the therapist might persist, resulting in a tense and unproductive exchange. Indeed, interpretations are sometimes found to hinder the process of therapy (Piper et al., 1999b). A later study by Schut, Barber, Castonguay, Flanagan, and Yamasaki (2005) found that a higher concentration of interpretations⁹ was linked to worse client outcome on a number of separate measures. Schut et al. (2005) pondered whether this finding might be related to interpersonal weaknesses in their particular participants, who were being treated for avoidant personality disorder.

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⁹ In Schut’s (2005) study, transference and nontransference interpretations were aggregated for the analyses, due to a low incidence of transference interpretations in the therapy sessions.
As described above, most of the research on the therapeutic impact of interpretations has focused on studying the link between therapist interpretations and clients’ global, post-therapy gains. Client functioning is generally measured in terms of symptoms identified on self-report questionnaires. Some studies have also included pre- and post-therapy ratings by third-parties on measures such as the Global Assessment Scale (e.g., Milbrath, Bond, Cooper, Znoj, Horowita, & Perry, 1999); however, only a small proportion of studies have taken into account the client’s immediate, in-session reaction to clients.

One such study by Joyce and Piper (1996) involved a unique, microanalytic investigation of the therapeutic role of interpretations. Rather than examining the impact of interpretations on clients’ post-therapy gains, they investigated client’s immediate, in-session reactions to interpretations. Moreover, they utilized advanced statistical procedures (hierarchical linear modeling) such that they would be able to answer more complex questions regarding the patterns of change demonstrated by clients. For example, the authors considered whether certain variables (e.g., quality of object relations (QOR), initial symptom severity, and treatment outcome) might predict the clients’ responses to interpretations. The results indicated that significant variation existed in terms of the patient’s responses to therapist interpretations, such that some tended to respond in a reflective manner, while others tended to resist interpretations. Further analyses provided information regarding which variables accounted for differences between clients. Joyce and Piper (1996) found the responses of high and low QOR clients differed depending on the type of therapist interpretation. For example, low QOR clients tended to respond more reflectively when therapists made interpretations pertaining to anxiety, while high QOR patients responded more reflectively when therapists made transference interpretations. Additionally, results indicated that patients in the high QOR group with good treatment
outcomes tended to respond with resistance to certain types of interpretations. The latter finding was unexpected because, based on dynamic theory, resistance is associated with poor outcomes. In the end, Joyce and Piper (1996) concluded that therapists should use certain interpretations cautiously, because they have the capacity to result in increased symptoms of anxiety in some clients, and thus a poor outcome.

Like Joyce and Piper (1996), Andrusyna, Luborsky, Pham, and Tang (2006) focused on the more immediate changes that might follow an interpretation. The latter authors studied interpretations in the context of sudden client gains, which occur in some patients, across various therapeutic modalities. Based on psychodynamic theory, the therapeutic relationship and insight are key ingredients leading to therapeutic gains. Hence, the session prior to a “sudden gain” might logically be characterized by a better therapeutic alliance and more accurate interpretations, in contrast to a control session. Indeed, the results suggested that pre-gain sessions contained more accurate interpretations, and possibly a stronger therapeutic alliance (Andrusyna et al., 2006). Interestingly, pre-gain sessions were not characterized by the types of cognitive changes that precede “sudden gains” in CBT (Tang, DeRubeis, Beberman, & Pham, 2005). The authors interpreted the latter findings as an indication that certain, distinct mechanisms of change might operate in different therapeutic modalities.

In conclusion, Section 2.4 reviewed the literature on specific therapist factors theorized to promote client progress. Luborsky (1984) stipulates that, in SET, expressive interventions are key therapist factors leading to client insight and change. Although many psychodynamic theorists have written about the role of interpretations as important agents of therapeutic change, far fewer researchers have empirically tested this theory. Of the scientific research on therapist interpretations, there is some evidence demonstrating a link
between interpretations and client change. However, the nature of this link appears to be complex, and moderated by the dynamics of the therapist-client relationship. It can be concluded that more empirical research is warranted, and that micro-analytic research would be particularly useful, given the limited information obtained by macro-analytic studies.

Section 2.5: The Role of Client Factors in SET

The literature reviewed in Section 2.4 focused on therapist variables and their role in promoting client gains. The current section considers the process of therapy with a focus on the client. The ways in which clients exhibit therapeutic gains are discussed in this section. With respect to SET, Luborsky (1984) emphasized that CCRT-related insight and self-understanding were critical elements indicative of client improvement. Indeed, Luborsky (1984) and Book (1998) spoke about SET as a forum for clients to develop increased mastery over the components of their maladaptive relationship patterns (Luborsky, 1984, p.20-21; Book, 1998, p.165)

As discussed in Section 2.2, some of the literature on SET has investigated clients’ narratives over the course of treatment, revealing that clients who exhibit high levels of symptomatic change also have less pervasive CCRTs post-treatment (Crits-Christoph & Luborsky, 1998). Following the completion of SET, clients’ REs involved fewer negative ROs and RSs. In fact, not only did negative responses decrease, but positive responses increased with respect to RSs, which were significantly more frequent post-treatment. Similar results have been found through the comparison of clients’ REs in early sessions and late session of dynamic psychotherapy (Crits-Christoph & Luborsky, 1998). In these
studies, changes in the clients' patterns were also associated with symptom relief, suggesting that interpersonal changes mediate improvements in depression (Crits-Christoph & Luborsky, 1990; Crits-Christoph & Luborsky, 1998). However, interestingly, despite the changes in the clients' patterns and symptoms, clients' CCRT remained characteristic of their relational interactions.

Although changes in behaviour have been found to relate to changes in symptoms, several authors have argued that such changes are not the primary gains achieved via psychodynamic therapy (Grenyer, 2002; Grenyer & Luborsky, 1996; Crits-Christoph & Connolly, 1998). After completing follow-up interviews with patients who had completed psychoanalysis, therapists have determined that the transference pattern remained quite intact (Pfeffer, 1963; Schlesinger & Robbins, 1975), while changes were noticeable in the ability to self-reflect and tolerate negative emotions (Schlesinger & Robbins, 1975). In a case study by Schelsinger & Robbins (1975), client improvements were said to result from the strengthening of ego resources, which allowed for enhanced self-analytic work in the mastery of conflicts. These types of changes in perception, self-reflection, and emotion management have long been discussed in the psychodynamic literature, and across various schools of psychotherapy. As stated by Frank (1971), "all successful therapies implicitly or explicitly change the patient's image of himself from a person who is overwhelmed by his symptoms and problems to one who can master them (p.357)."

**Process and Outcome as “Mastery.”** In an unprecedented effort, Grenyer (2002) studied the use of the term “mastery” in the psychotherapy literature. He acknowledged that scholars of various theoretical orientations describe a concept of clients “mastering” difficulties, and this concept appears to be quite similar from one school to another. Nonetheless, while the concept of “mastery” has often been discussed in theoretical terms, it
has long remained an ambiguous, poorly-defined idea. Driven by an interest to study the process in which clients master their psychological conflicts, Grenyer (2002) set out to define the concept of mastery.

As a psychologist who predominantly espouses psychodynamic theory, Grenyer (2002) focused on uncovering the psychoanalytic roots of “mastery.” Although Grenyer (2002) explored the concept of mastery in relation to the many psychodynamic camps (e.g., ego psychology, object-relations theory, and self psychology), he believed that a theory of mastery would be more linked to early psychoanalytic (drive theory) principles. Grenyer (2002) discussed the writings in which Freud evoked mastery as both the process and outcome of working through a neurosis. For example, Freud’s early writings described the repetition compulsion, driven by the energy fixated in the id, as an unsuccessful attempt at mastery. In contrast, successful attempts at mastery involved the transfer of energy from the id to the ego, a process characterized by increasingly mature, and adaptive problem-solving. This transition from primitive to more sophisticated functioning is expressed in Freud’s (1933) famous axiom: “where id was ego shall be (p.80).”

Grenyer’s (2002) conceptualization of mastery is therefore influenced by many of Freud’s notions on psychotherapy and client improvement. Grenyer (2002) concludes that mastery encapsulates (1) the client’s ability to exert self-control over maladaptive response patterns, as well as (2) the client’s ability to self-reflect, understand his/her difficulties, and develop adaptive perspectives on problems. Grenyer (1994) decided on the following brief definition of mastery: “the development of emotional self-control and intellectual self-understanding in the context of interpersonal relationships.” Akin to Freud, Grenyer (2002) conceptualized mastery both as a process and outcome.

Grenyer’s (1994) concept of mastery can be further explained by contrasting the
qualities indicative of low versus high mastery. A low level of mastery is characterized by a tendency to react with excessive distress across various interpersonal situations, in addition to a lack of awareness of the causes of the problematic situations. Those who are at a low level of mastery might engage in self-harm or easily lose their temper. In contrast, a high level of mastery is characterized by adaptive control of one’s emotional reactions in the face of difficult interpersonal situations. A well-developed understanding of the possible origins and motives behind conflicts would reflect higher levels of mastery. Those at a high level of mastery might be able to defend themselves assertively, engage in compassionate perspective-taking, or tolerate strong emotions.

Mastery in Therapy Research. In order to research his theory of mastery, Grenyer (1994) developed the mastery scale method (further discussed in Chapter 4) to be used in the analysis narrative statements. In their conceptualization of psychological distress, Grenyer and Luborsky (1996) assert that most people seek psychotherapy when overwhelmed by symptoms and difficulties related to relationships. Most forms of talk therapy involve client narratives regarding relationship problems, and from a psychodynamic perspective, Grenyer and Luborsky (1996) theorize that these narratives were told in the service of mastery, in the same way that Freud’s (1920) child cases played repetitively in an attempt to master traumatic situations. In accordance with psychoanalytic principles, Grenyer and Luborsky (1996) also asserted that clients’ unpleasant symptoms are heightened when they unconsciously repeat their maladaptive, conflictual pattern of behaviour. Over the course of psychotherapy, clients develop mastery over their maladaptive patterns, which involves gaining insight, self-understanding, and self-control in relation to these patterns.

A primary goal of Grenyer and Luborsky’s (1996) research was to demonstrate that
changes in client mastery occurred between the onset and termination of therapy. They also sought to show that changes in mastery would map on to changes in symptoms. Moreover, the authors examined whether changes in mastery paralleled changes in the components (W, RO, RS) of the CCRT. Participants were 41 adult patients who had received time-unlimited SET. Approximately half of these clients had diagnoses of a personality disorder, while the remaining clients had a primary diagnosis of dysthymia (15 clients), or generalized anxiety disorder (11 clients). Data were collected in the form of various outcome measures (e.g., the Health-Sickness Rating Scale) obtained pre- and post-therapy, in addition to scored transcripts of clients’ early and late therapy sessions. The transcripts were scored using the mastery scale method (Grenyer, 1994). Results suggested that levels of interpersonal mastery increased following psychoanalytic psychotherapy (Grenyer & Luborsky, 1996); that is, client narratives contained fewer scores at the low end of the mastery scale (i.e., scores reflecting poor self-control and cognitive disturbance) and more frequent scores at the high end of the scale (i.e., scores reflecting self-control and self-analysis). The authors provided an example of one of their clients who commenced therapy with a number of concerns reflecting lower levels of mastery. More specifically, this client suffered in relation to conflictual reactions with others, feelings of worthlessness and guilt, avoidance of interpersonal interactions, and masochistic tendencies (e.g., asking men to hit her). Near the end of therapy, she began to reflect on her experiences and behave differently. More specifically, she came to understand that she held the belief that men were “evil,” and recognized that this belief was linked to lingering anger from early experiences with an abusive male. She then worked through these feelings and beliefs, and began to approach relationships in a different way.

Further data analyses indicated that increases in interpersonal mastery were
significantly related to improvements on measures of global functioning (Grenyer & Luborsky, 1996). It is therefore possible that developments in interpersonal mastery may mediate changes in symptoms, as theorized by the authors of the study. Moreover, Grenyer and Luborsky (1996) found that changes in mastery paralleled changes in the RS component of the CCRT. That is, clients with greater increases in interpersonal mastery tended to exhibit more positive reactions to interpersonal conflicts in the late stages of therapy. This finding corroborates the results of previous studies on the CCRT, which indicate little change occurs in the RO and W following therapy (e.g., Crits-Christoph & Luborsky, 1998a). This suggests that clients continue to experience relational conflicts when therapy ends, and they continue to experience other people in a similar way. By and large, clients’ maladaptive patterns persist, as demonstrated in previous studies (e.g., Crits-Christoph & Luborsky, 1998a). However, their own responses to relationship conflicts change, in that they display more adaptive affective, cognitions, and/or behaviours following therapy.

Grenyer (2002) continued to explore the developments of the 41 participants from the abovementioned research. Firstly, he sought to understand the relationship between the therapeutic alliance and changes in interpersonal mastery. Results showed that improvements in interpersonal mastery could be predicted by the strength of the therapeutic relationship. This finding suggests that interpersonal mastery is similar to other measures in the literature which tap client progress.

Grenyer (2002) explored a second issue pertaining to client’s maladaptive patterns. In light of earlier findings showing a link between gains in interpersonal mastery and the RS, Grenyer (2002) wanted to better understand how clients’ CCRT related to interpersonal mastery. Interestingly, the author noted that his participants tended to have very negative
CCRTs overall, as is common in other research on adults’ CCRTs (e.g., Crits-Christoph & Luborsky, 1998a). However, for a subsection of the sample classified by the therapists as “improved,” large reductions were observed in the negativity of the RS, along with large increases in the positivity of the RS. In contrast, within the subsection of the sample classified as “non-improved,” the reverse pattern was evident. Clients’ changes in RS were significantly related to improvements in interpersonal mastery. Again, these results suggest that shifts occur in the clients’ own affects, cognitions, and behaviours during therapy, while little change occurs regarding the client’s wish in relationships, and the perceived reactions of other people in their lives.

Lastly, Grenyer (2002) investigated the relevance of different relationships discussed by clients, by studying clients’ relationship narratives about different groups of people (e.g., lovers, parents, family members, friends, acquaintances, and the therapist). He examined changes in mastery between early and late stages of therapy for each relationship group discussed by the clients. Given that early relationships (e.g., parent-child relationships) are afforded much weight in psychodynamic theory, and given that most REs in therapy involve family members (Luborsky et al., 1998), Grenyer (2002) questioned whether changes in clients’ interpersonal mastery differed when they discussed family members, in contrast to other relationships. He also investigated whether clients’ interpersonal mastery varied when different groups of people (lovers, parents, family members, friends, acquaintances, and the therapist) were discussed. While meaningful changes in interpersonal mastery were not observed in most of the relationship groups, some patterns became clear. Significantly higher levels of mastery were observed later in therapy when the narratives studied involved clients’ parents. A similar pattern was observed, but to a lesser degree, when the narratives studied involved clients’ lovers. These results appear to reflect the particular potency of
children’s relationships with parents. Additionally, the findings indicate therapists might foster better results by paying particular attention to conflicts between the client and his/her parents.

Taken together, results of the research on interpersonal mastery (Grenyer & Luborsky, 1996; Grenyer, 2002) provide preliminary evidence for the importance of this construct as a factor involved in client improvement. The present thesis hopes to build on Grenyer’s studies by replicating some of the abovementioned findings with a new sample of clients, and by studying the link between therapist interventions and interpersonal mastery.

Section 2.6: The Use of Sequential Analyses in Examining Therapist-Client Interactions

As discussed in Sections 2.4 and 2.5, there is a need for more research on the factors leading to client gains during psychotherapy. In the literature, there is evidence to support the postulations that therapist techniques and client interpersonal mastery foster client improvement. However, given the limited research to date, it is too early to draw any definite conclusions. One way to develop our understanding of the factors promoting therapeutic change is to expand the methodological breadth of the research. Most studies of therapist interventions have focused on the link between therapist statements and macro-outcomes, such as the change in symptoms pre- and post-therapy. In contrast, the study of client micro-outcomes (i.e., clients’ immediate response to interventions) has received limited attention (Milbrath, Bond, Cooper, Znoj, Horowitz, & Perry, 1999). Below, the drawbacks of macro-analytic research are discussed, along with the advantages of using micro-analytic techniques (e.g., sequential analysis) to address the current research questions. The principles and procedures involved in sequential analysis are also
summarized below.

Although macro-analytic research has the capacity to offer valuable findings, the knowledge we have gained from such studies has been inadequate in terms of describing the influence of specific therapist techniques in promoting client change. In the psychotherapy process literature, macro-analytic studies have provided mixed, unclear results about the association between therapist techniques and measures of client functioning (discussed in Lambert, 1994). Macro-analytic designs generally measure the relationship between broad characteristics of an intervention (e.g., the frequency or quality of therapist interventions in a session) and changes in clients' symptoms pre- and post-therapy. While macro-analytic studies can identify important relationships between variables, they are better at examining static versus dynamic events. Consideration of the timing or sequence of dynamic events can reveal how two variables are linked, yet macro-analytic designs do not capture this information.

Fortunately, micro-analytic methodologies can be used to study therapist interventions from a different angle, possibly leading to a deeper understanding of their impact on clients. Sequential analyses, for example, involve tools that consider the timing of small-scale events within interactive processes like therapy sessions. These analyses are specifically intended for the study of dynamic processes in social interactions. There are a number of different types of sequential analyses, including Markov chain analysis, lag sequential analysis, log-linear analysis, and graphical analysis. Clinical researchers have advocated for the increased use of sequential analyses in psychotherapy research, stating their unique non-parametric design is optimal for detecting informative trends in clinical interactions (Barbera & Waldron, 1994; Moran, Diamond, & Diamond, 2005).

Bakeman and Gottman (1997) have carefully described the procedures employed as
part of sequential analyses. All types of sequential analyses require the careful coding of small-scale, interactive events involving 2 or more variables of interest. The data, which can be nominal or ordinal, are generally organized in the form of a contingency table, which helps to provide preliminary information about the process variables. In graphical analyses, data are strategically presented in graphical formats to maximize the natural human ability to visually detect trends. In other types of sequential analyses (e.g., Markov chain analysis, lag sequential analysis, and log-linear analysis), information is obtained about different types of probabilities. In fact, the essence of sequential analysis lies in the thorough inspection of probabilities. Bakeman and Gottman (1997) describe the types of probabilities which can be useful to analyze. For instance, ‘simple’ probabilities describe the likelihood of a target event (e.g., the probability of a target client statement in any given session), ‘conditional probabilities’ describe the likelihood of a target event given the presence of another, specific event (e.g., the probability of a target client statement in a session *given a specific therapist statement in the same session*), and ‘transitional’ probabilities describe the likelihood of a target event following another, specific event (e.g., the probability of a target client statement following a specific therapist statement).

In some types of sequential analysis (e.g., lag-sequential or log-linear analyses), data are analyzed to evaluate whether the expected transitional probability of a sequence matches the observed probability. In the present study, the data plan called for the use of graphical analyses, lag sequential analyses, and log-linear analyses, to help determine whether high-level client statements were more likely to follow expressive interventions versus supportive interventions. Lag sequential analyses involve pattern-detection in two-way contingency tables, while log-linear analyses involve pattern-detection in multivariate
As mentioned above, the use of sequential analysis to study the interactions between therapists and clients has been limited. However, sequential methods have produced valuable results in certain specific areas of psychotherapy process research. For example, behavioural researchers are renowned for using time series graphical analyses (a type of sequential analysis) to determine whether particular interventions (e.g., therapist praising a child client) are followed by particular client behaviours (e.g., child's compliance with adult requests; Lampropoulos, Goldfried, Castonguay, Lambert, Stiles, & Nestoros, 2002; Ducharme, Atkinson, & Poulton, 2001; Chambless & Hollon, 1998). In relation to talk therapies, the use of sequential analyses has been much less common. Nonetheless, sequential analyses have occasionally been used to study patterns of conversation between therapists and clients. For example, in a process study of family therapy, De Kemp and Van Acker (1997) identified a pattern of collaborative statements between therapists and mothers, which was associated with positive therapy outcomes in the children (identified clients). Another study used sequential analysis to study the relationship between therapists' interventions and clients' verbal responses in brief psychodynamic psychotherapy (Milbrath et al., 1999). Results indicated therapist interpretations tended to precede client emotional disclosures. In contrast, other therapist statements tended to precede client factual statements. The present research is similar to that of Milbrath et al. (1999) in that sequential analyses are used to determine whether particular therapist techniques (supportive or expressive statements) tend to precede particular client statements (statements reflecting various degrees of interpersonal mastery). The specifics

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10 Cross-classified data is continuous data which contains information on a number of different levels. Data are cross-classified if they contain information on three or more levels; e.g., client level (each client), time level (session number), and code level (TIL or mastery scale).
of the sequential analyses employed in this thesis are described in Chapter 4 (Methods).

In contrast to most research investigating the impact of therapist interventions on clients, the present study sought to understand therapeutic processes on a micro-process level. Unlike most macro-analytic methods, micro-analytic tools like sequential analysis explore associations between variables by considering how a large number of small-scale events are sequenced in time. While behavioural researchers have used sequential analyses to better understand behavioural interventions, the approach has rarely been applied to talk therapies. In relation to the present dissertation, it was expected that the use of sequential analyses would yield interesting insights into the relationship between therapist interventions and client narratives.
Chapter 3

Study Hypotheses

The present research offers a unique, in-depth, investigation of the therapist and client factors theorized to promote change in SET, a brief psychodynamic psychotherapy. As part of the current thesis, a microanalytic study of therapeutic change was undertaken in an attempt to improve our current, limited understanding of the specific factors leading to symptom reduction following psychodynamic psychotherapy. In keeping with psychodynamic theories of therapeutic change (Luborsky, 1984; Grenyer & Luborsky, 1996), and taking into account previous research, the following factors were identified as potentially important agents of change in SET: therapist expressive techniques and client interpersonal mastery. The main research questions of the present thesis investigated whether these factors do, in fact, promote change. Hypotheses for each of these questions are detailed below.

Research Question 1: Developments in Interpersonal Mastery Over The Course of Therapy

SET was designed to help clients develop mastery over their most prevalent, maladaptive interpersonal pattern: the CCRT. The first objective of the present study was to investigate whether, in accordance with theory (Grenyer & Luborsky, 1996), clients demonstrated increased levels of interpersonal mastery over the course of psychotherapy.

_Hypothesis 1._ It was hypothesized that clients’ narratives would reflect increases in interpersonal mastery across the 4 time points in the therapeutic process (pre-therapy, session 5, session 10, and session 15).
Based on the study by Grenyer & Luborsky (1996), it was expected that clients’ mean interpersonal mastery scores would be higher in the later stages of SET, in comparison to the earlier stages. Grenyer and Luborsky (1996) also found that clients displayed changes in the percentage of different Mastery Scale codes in late psychotherapy as compared to early psychotherapy. Across all clients, MS codes indicative of low mastery decreased in frequency in late therapy, while many codes indicative of high mastery increased in frequency. It was therefore hypothesized that client participants in the present study would exhibit a decrease in low-level MS codes, along with an increase in high-level MS codes. In other words, clients’ narratives were expected to reflect fewer impulse-control difficulties, while demonstrating an increase in expressions of self-understanding and self-control.

Given that clients generally improve gradually in relation to chronic traits (e.g., relational difficulties and maladaptive personality characteristics; Barkham et al., 1993), it was hypothesized that the mean interpersonal mastery scores would increase gradually across the 4 consecutive time points being studied (i.e., a preparatory session, session 5, session 10, and session 15).

**Research Question 2: The Effect of Therapist Statements on Interpersonal Mastery**

Psychodynamic theorists have classified therapist techniques into two categories: supportive and expressive techniques. While both types of techniques are believed to be important, psychodynamic theorists postulate that expressive techniques are particularly potent with respect to fostering mastery.

**Hypothesis 2.** It was hypothesized that the use of expressive therapeutic techniques (i.e., challenges, confrontations, and interpretations) would be associated with higher levels
of client interpersonal mastery.

The second research question first focused on expected trends in the therapists’ use of specific techniques over time. In the SET manuals by Luborsky (1984) and Book (1998), the various stages of therapy were outlined along with the therapists’ role at each stage. Based on the description of the therapists’ role in these manuals, it was expected that SET therapists would use more higher-order expressive statements in the later sessions. In the pre-therapy stages, the therapists’ task is to encourage clients to recount REs, including information pertaining to the W, RO, and RS. This task involves mostly the use of exploratory statements to help the client reflect on their experiences for the purpose of providing information about their perceptions. In session 5 (the second time point), the therapist is finalizing Phase I of therapy (where the therapist helps the client recognize the ubiquity of the CCRT) and guiding the client into Phase II (where the therapist helps the client understand the CCRT as an outdated interaction style, which is obstructing the client’s Wish). In session 15 (the fourth and last time point), the client and therapist are engaged in Phase III of the therapeutic process, where the therapist’s role is to help the client reflect on the upcoming termination of therapy, and consider links between the response to termination and the CCRT.

It is between Session 5 and continuing past session 10 – after a therapeutic alliance has had time to form – that the therapy is expected to gain the most momentum. It was therefore hypothesized that mean TIL scores would increase gradually across the first 3 consecutive time points (pre-therapy session, session 5, and session 10) being studied. It seemed likely that TIL scores would then plateau or decrease. By Phase III of the therapeutic process, pivotal ideas (e.g., the roots of the CCRT, its evolution, and its consequences) have already been discussed. The focus turns to termination during Phase
III. The momentum would therefore be expected to be slower by this point.

Along with changes in mean TIL scores, it was expected that the proportion of supportive and expressive statements would change over the course of therapy. It was hypothesized that therapists would use more higher-order expressive statements over the course of therapy (from pre-therapy to session 5, and session 10), with the frequency of these statements likely plateauing by the last time point (session 15). It was therefore also expected that therapists would employ a greater proportion of higher-order expressive statements in the later stages of therapy. Correspondingly, it was expected that therapists would employ a smaller proportion of supportive statements in the later stages. Although therapists were expected to demonstrate a smaller proportion of supportive statements in the later sessions, it was definitely expected that therapists would employ a sizeable proportion of supportive statements at each stage of the therapy process. Luborsky (1984) and Book (1998) encouraged the use of supportive techniques throughout SET, with attention to the particular needs of each client.

After investigating trends in therapist statements over time, the second research question focused on the link between higher order expressive techniques and client interpersonal mastery. Based on psychodynamic theory, expressive (or interpretive) interventions are considered to be an especially powerful agent of change (Bibring, 1954; Barber et al., 1996), and one of the changes reported to occur throughout therapy is increased client mastery over interpersonal struggles. Psychodynamic theorists have long written that clients gain mastery over recurring problems through the process of psychotherapy, and resent research provides empirical evidence that clients develop increased interpersonal mastery in SET (Grenyer & Luborsky, 1996).

Although some researchers have studied expressive interventions and others have
studied interpersonal mastery, the connection between therapists’ expressive interventions and clients’ interpersonal mastery has not yet been investigated. Despite the absence of empirical research in this area, the psychodynamic literature suggests that expressive interventions help clients develop insight into maladaptive processes operating unconsciously (Blanck, 1966; Freud, 1914/1953; Fromm-Reichman, 1950; Barber et al., 1996; Spiegel & Hill, 1989), and that expressive techniques in SET are likely to foster insight with respect to relationship conflicts (Luborsky, 1984; Book, 1998; Brenner, 1976). In contrast to expressive interventions, the literature suggests supportive interventions are the building blocks of a safe therapeutic environment, rather than building blocks of insight and deep psychological change (Luborsky, 1984; Book, 1998; Barber et al., 1996). With respect to the present research, it was therefore hypothesized that clients would exhibit higher levels of interpersonal mastery when expressive interventions were employed by the SET therapist, in contrast to when supportive interventions were used.
Chapter 4

Methods

As described above, the objectives of the present study were multifold. The first main goal was to investigate the notion that SET helps clients develop increased levels of interpersonal mastery. The second was to empirically study the postulation that expressive techniques (e.g., interpretations) are particularly important agents of change in the psychotherapy process. In order to analyze these goals, the appraisal of preliminary data regarding the effectiveness of SET for adolescents with mood and/or anxiety disorders was conducted.

Chapter 4 begins by describing the project setting, the adolescent clients, and the SET therapists. Subsequently, the chapter outlines the procedures employed, the measures used, and analyses planned to accomplish each of the research objectives.

Setting

The project took place at the Centre for Addiction and Mental Health (CAMH) in Toronto, Ontario. The research was overseen by a psychologist working within the Mood and Anxiety Service of the Child, Youth and Family Program.

Participants

Clients. Participants for the present study were adolescents (15 to 18 years old) referred to the Mood and Anxiety Service of the Child, Youth and Family Program at CAMH between January 2004, and April 2008. These adolescents were part of a larger research project examining the effectiveness of SET (Wilansky-Traynor, 2010). The Mood and
Anxiety Service accepts self-referrals as well as secondary referrals from pediatricians and mental health professionals in Toronto and its surrounding suburbs.

Eligible participants reported strained relationships and met DSM-IV criteria for a depressive and/or anxiety disorder following a thorough psychological assessment. The assessment included individual, semi-structured interviews with each adolescent and separate semi-structured interviews with one, or both of their parents. Participant exclusion criteria included active psychosis, acute risk for suicide, developmental delay, a diagnosis of bipolar disorder, lack of fluency in English, and seriously impaired learning, vision, hearing, or speech.

During the period of recruitment, 16 adolescents expressed an interest in participation and qualified for the study. All client participants were female, reflecting the well-documented preponderance of females among adolescents suffering from depression (Kessler, McGonagle, Swartz, Blazer, & Nelson, 1993; Nolen-Hoeksema & Girgis, 1994), anxiety (Lewinsohn, Gotlib, Lewinsohn, Seeley, & Allen, 1998), and interpersonal stressors (Gore, Aseltine & Colten, 1993; Siddique & D’Arcy, 1984; Wagner & Compas, 1990). Of the 16 potential participants, 6 were not included in the data analyses for various reasons: one adolescent did not commence treatment, three terminated therapy after 5 or fewer sessions, one did not allow sessions to be audiotaped, and one adolescent's tapes were accidentally recorded over by the therapist.

Therapists. The SET therapists were practicing clinicians at CAMH, in the Mood and Anxiety Service of the Child, Youth, and Family Program. There were a total of 9 therapists, and each adolescent was assigned a single clinician, based on therapist availability. One of the therapists was assigned to two adolescents, while all other therapists were assigned

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11 Suicidal ideation was not an exclusionary criterion.
12 See procedure section of this chapter for more information on the taping of therapy sessions.
only one client. Given the small number of clients per therapist, therapist-specific effects were not examined as part of the analyses.

In terms of the clinicians' professional education, one therapist was a psychologist, one was a social worker, and 7 therapists were Ph.D. candidates in psychology. All therapists were female, reflecting the female-dominated nature of the profession (Curtis, Lopez, Batsche, & Smith, 2006; Olos & Hoff, 2006; Bradley, 2000). Other than the psychologist, all therapists were new to using SET. However, they were familiar with Luborsky’s (1984) and Book’s (1998) SET manuals, followed the manuals closely, and received weekly supervision from the psychologist on their cases.

**Procedure**

*Client Enrolment in the Study.* Ethical approval for the study was obtained from the Research Ethics Board of the Centre for Addiction and Mental Health. Following a thorough psychological assessment, adolescent clients were invited to participate in the present study if they met the criteria described above (see *Participants* section) and expressed an interest in receiving psychotherapy. The clients met individually with the head psychologist or one of the research assistants to discuss participation in the study. During this meeting, the staff and client verbally reviewed a consent form, which provided a brief description of the psychotherapy and the parameters of research participation. One important aspect of the research was the audiotaping of all SET sessions. If clients did not consent to audiotaping, they remained eligible to receive the intervention, albeit not as part of the present study. It was emphasized to clients that their participation in the study, or lack thereof, would not affect opportunities to participate in SET or other treatments available at CAMH.

Those clients who consented were given a package of self-report questionnaires
(described below) to complete. An appointment was then scheduled for the first session of SET. As is typical of SET, the main segment of the therapeutic process took place over 16 sessions, each of which lasted approximately 45 minutes. See Chapter 2 for a complete description of SET.

The ten adolescent participants either completed all 16 sessions (7 adolescents), 15 of 16 sessions (2 adolescents), or 11 of 16 sessions (1 adolescent). Some of the analyses include fewer than ten participants due to incomplete data from the three participants who did not attend all 16 sessions.

Transcription of the Therapy Sessions. For each client, four of the audiotaped sessions (45 to 60 minutes in length) were fully transcribed. Generally, the following sessions were transcribed: a pre-therapy session (from the initial phase of SET), session 5, session 10, and session 15. For 8 out of 38 sessions, an alternate session was transcribed (e.g., session 6 instead of session 5) due to difficulties accurately deciphering one or both voices on the recording. Also, one of the therapy sessions was missing for client H (session 15), and another was missing for client J (pre-therapy session). Session 15 was missing for client H due to her unexpected need to terminate therapy following Session 10 (i.e., her family moved suddenly to a location from which it was too far to commute to weekly therapy sessions). The pre-therapy session was missing for client J due to a technical difficulty (i.e., the session did not record). With session substitutions, there were either 9 or 10 sessions coded at each time point.

In cases where alternate therapy sessions were utilized (instead of the standard 4 time points), transcription of the very first and the very last session were avoided due to their distinct qualities. As discussed by Grenyer (2002), the initial session often involves a great
deal of explanations on the part of the therapist, and the client is often getting comfortable speaking freely. The last session was avoided due to its complete focus on termination, and the possibility that early symptoms might temporarily return (see Grenyer, 2002).

Careful consideration was given to the number of sessions that should be transcribed to address the research questions. Keeping in mind the first main objective of the study – to track changes in interpersonal mastery over time – it was determined that a minimum of four time points would allow for the detection of various possible patterns of change. Reducing the number of time points to three might render certain patterns difficult to detect. For example, one might not be able to detect a steep improvement in functioning occurring very early in the treatment.

The sessions were transcribed verbatim by the author, as well as research assistants enrolled in psychology programs at the graduate or undergraduate level. The instructions for transcribers were to type out the sessions word for word. Nonverbal utterances (e.g., sighs, coughs) were not transcribed. The author reviewed random segments of the transcripts (at least 10%) to ensure that sessions were transcribed appropriately by research assistants. Few modifications to the reviewed transcripts were required following review by the author. The audiotape for one of the sessions was re-transcribed due to some difficulty deciphering the therapist’s statements.

**Self-Report Measures**

The following questionnaire measures were used to assess the clients' levels of functioning pre- and post-treatment. Copies of these scales are not included in the appendices due to copyright restrictions.

*Beck Depression Inventory-II.* The Beck Depression Inventory-II (BDI-II; Beck, Steer,
& Brown, 1996) was used to assess the severity of the participants’ depressive symptoms. This inventory is a widely used, standardized, and empirically-derived measure of depression, intended for use with adolescents (13 years of age or older) and adults. The BDI-II is a self-report measure consisting of 21 items, which correspond to the criteria for depressive disorders in the DSM-IV-TR (American Psychiatric Association, 2000). Responses are indicated on a four-point Likert-type scale (0 to 3), with higher scores reflecting more severe symptoms. A raw score is obtained by summing the ratings for all items. As shown in the BDI-II manual, total scores fall into categories specifying the severity of depressive symptoms (Minimal depression = 0-13, Mild depression = 14-19, Moderate depression = 20-28, Severe depression = 29-63).

As indicated in the manual (Beck et al., 1996), internal consistency coefficients are high for both clinical (.92) and nonclinical (.93) samples. Test-retest reliability, which was calculated using a one-week interval between testings, was also found to be high (.93). Content, construct, and factorial validity were assessed and found to be adequate (see Beck et al., 1996).

**Multidimensional Anxiety Scale for Children (MASC; March, 1997).** The Multidimensional Anxiety Scale for Children was used to assess the extent of participants’ anxiety. The MASC is a widely-used, standardized, self-report measure designed for use with young people 8 to 19 years of age. This measure, which assesses a broad range of anxiety symptoms, provides a rating of overall anxiety (Total Anxiety Scale), as well as ratings in four specific domains: Physical Symptoms, Social Anxiety, Harm Avoidance, and Separation/Panic. Additionally, the MASC provides scores on two indices: the Anxiety Disorder Index and the Inconsistency Index.

The MASC consists of 39 statements. The respondent must read each statement
and indicate how accurately the statement describes her. Responses are indicated on a four-point Likert-type scale (0 = Never true about me, 1 = Rarely true about me, 2 = Sometimes true about me, and 3 = Often true about me). Raw scores obtained are converted to T scores according to age and gender norms. Higher scores reflect greater levels of anxiety.

Internal consistency coefficients are high (.60 to .93) across epidemiological samples (March, 1997). Concurrent validity with the Anxiety Disorders Index (March et al., 1997) and discriminant validity (March 1995; 1997) were also found to be adequate.

Process Measures

The following process measures were used to evaluate the content of the therapy sessions:

Mastery Scale (MS; Grenyer, 2002). The mastery scale is a coding system used to score transcripts of narratives. The transcripts must first be processed to identify scorable clauses (see Appendix A) and these clauses are each assigned a single score of between 1 and 6. Each level of the mastery scale corresponds to increasingly higher levels of competence in the domain of interpersonal mastery. For example, the lowest level of the mastery scale (a score of 1) denotes a lack of impulse control in interpersonal situations, while the highest level of the scale (a score of 6) denotes self-control and reflection in interpersonal situations. Within each level of the mastery scale, scores are broken down into subclassifications which reflect specific aspects of interpersonal mastery. For a description of the levels and subclassifications of the scale, see Table 2.

The mastery scale provides rich quantitative data about participants’ understanding of relationship conflicts and their ability to handle interpersonal stressors. The mastery scale has been previously used in psychotherapy research (e.g., Grenyer & Luborsky, 1996).
and found to have adequate psychometric properties (Grenyer, 2002; Grenyer, 1994). For example, inter-rater reliability for 4 scorers was between .75 and .89, and test-retest reliability after a 1-week delay was between .86-.97 (Grenyer, 2002). In terms of validity, important clinical outcome variables (e.g., changes on a global assessment scale and changes in primary symptoms) were found to significantly (F = 13.84, p < .0001) account for 54% of the variance of the mastery scale (Grenyer, 2002). In the present study, participants' scores on the mastery scale at each point in time allow us to track changes in their interpersonal mastery.

*Therapist Intentions List (TIL; Hill, Helms, Tichenor, Spiegel, O'Grady, & Perry, 1988).* The Therapist Intentions List (TIL; Hill & O'Grady, 1985) is a pantheoretical coding system used to categorize the intentions underlying each statement made by a therapist during a psychotherapy session. Therapist intentions were defined as “a therapist's rationale for selecting a particular intervention to use with a client at any given moment within a session” (Hill & O'Grady, 1985). The TIL has been used in a number of psychotherapy research studies to date (e.g., Hill & O'Grady, 1985; Hill et al., 1988; Kivlighan, 1989).

The TIL was first put together by Hill and O'Grady (1985) based on an examination of therapists’ descriptions of their treatment goals. Successive drafts of the list were then evaluated and improved with the help of expert counsellors. The original TIL was comprised of 19 nominal, non-mutually exclusive intentions: set limits, get information, give information, support, focus, clarify, hope, cathart, cognitions, behaviours, self-control, feelings, insight, change, reinforce change, resistance, challenge, relationship, and therapist needs. Further analyses on the TIL indicated that certain intentions did not occur often enough to be useful
in research. The list was therefore collapsed into 7 main categories\textsuperscript{13} (Hill et al., 1988): Set Limits, Assess (get information, focus, and clarify), Educate, Support, Explore (cognitions, behaviours, and feelings), Change, and Restructure (insight, resistance, and challenge). The following intentions were not included in the revised intentions list: cathart, self-control, relationship, and therapist needs.

The TIL, which was developed for therapy research, was meant to be used along with transcripts, audiotapes, or videotapes of therapy sessions. Each therapist statement during the session is assigned an appropriate code on the TIL. In the research, coders have primarily been the therapists who conducted the sessions (Hill & O'Grady, 1985). Test-retest and inter-rater reliability were not calculated by Hill and O'Grady (1985) because the list was intended for the therapists to code their own intentions. As the authors did not plan for the list to be used by third-party raters, reliability ratings were not thought to be meaningful in its development. However, research shows that the TIL possesses adequate construct and concurrent validity (Fuller & Hill, 1985; Hill & O'Grady, 1985). For example, evidence of concurrent validity was established by examining the relationship between therapist intentions and therapist response modes. Sequential analyses demonstrated a predictable pattern of associations between therapist intentions and therapist response modes, and many of these associations occurred at a level much greater than chance (p<.001; Hill & O'Grady, 1985). Evidence for construct validity is partially based on the capacity of the TIL to differentiate between therapeutic orientations in a manner consistent with the theories underlying each approach. For instance, “feelings” (r = .33, p < .05) and “insights” (r = .51, p < .001) intentions were more frequently associated with the psychoanalytic orientation, while “change” (r = .50, p < .001), “set limits” (r = .43, p < .01),

\textsuperscript{13} A miscellaneous or ‘other’ category has been added as an 8\textsuperscript{th} category by some researchers (e.g., Barraclough, 2000).
and "reinforce change" ($r = .33$, $p < .05$) were associated with the behavioural orientation 
(Hill & O'Grady, 1985).

For the purposes of the present study, the TIL was slightly adapted to include 
categories that would often arise given the particular therapeutic modality being used (i.e., 
Supportive-Expressive Therapy). For example, due to the interpersonal focus of the 
treatment, the therapist is guided to explore three specific areas with the client: the 
*Response of Self* (i.e., how the client responds to others in interpersonal contexts), the 
*Response of Other* (i.e., how ‘the other person’ reacts in interpersonal contexts), and the 
*Wish* (i.e., how the client wishes her interpersonal interactions would play out). Therefore, 
when appropriate, the categories of the TIL are sub-categorized to reflect whether the 
therapist is addressing the *Response of Self, Response of Other*, or the *Wish*. Moreover, 
due to the nature of the therapy, which emphasizes the need for the therapist to employ 
both supportive and expressive techniques, each TIL category has been categorized as 
either a supportive or expressive technique.

Another important adaptation of the TIL was to highlight whether the therapist’s 
statements pertained to interpersonal relationships or to discussion of the therapeutic 
relationship. For the purposes of the present study, it was important to specify whether 
statements were related to the client’s interpersonal relationships because the purpose of 
SET is to foster change in relational interactions. Moreover, it was important to specify 
whether therapist statements pertained to the therapeutic relationship because the literature 
suggests that discussion of the therapeutic relationship has particular significance in the 
therapeutic process. As described in the Chapter 2, previous research has found that 
discussions pertaining to the therapeutic relationship (e.g., transference interpretations) can 
either lead to increased gains or deterioration (Beutler et al., 2004).
The adapted version of the TIL is presented in Table 3. Note that none of these adaptations should alter the TIL's basic properties because the adaptations consist mainly of parsing the instrument's scales into more precise components. As with the mastery scale, the therapist's statements were first divided into scorable clauses by the author (see Appendix A). Raters then assigned each clause a code from 1 to 9, based on the categories of specified in the list.

**Vanderbilt Psychotherapy Process Scale (VPPS; O'Malley, Suh, & Strupp, 1983).** The Vanderbilt Psychotherapy Process Scale (VPPS) is a pantheoretical measure of psychotherapy process, which was designed "to assess both positive and negative aspects of the patient's and therapist's behavior and attitudes that are expected to facilitate or impede progress in therapy" (Suh et al., 1986, p. 287). This scale is also used to assess the quality of the therapeutic alliance (discussed in Martin, Garsky, & David, 2000).

The VPPS was designed to be an objective measure, to be completed by external raters. The version used in this thesis consists of 58-item, which are rated on a Likert-type scale from 1, “not at all,” to 5, “a great deal.” The VPPS is particularly useful to the present study because it allows for the assessment of the therapeutic relationship from audiotapes of sessions, the form in which data was collected in this research.

The VPPS assesses two aspects of the therapeutic alliance: patient involvement and therapist's warmth and empathy. The items on the scale are clustered into 5 subscales: global ratings, patient's behaviour, patient's demeanor, therapist's behaviour, and therapist's demeanor. The VPPS has frequently been used in previous research (e.g., Henry, 1993; Bachelor & Salame, 2000) and has been found to have adequate internal consistency and inter-rater reliability (Suh, O'Malley, Strupp, & Johnson, 1983). Internal consistency for the various subscales ranged from .81 to .96, and inter-rater reliability ranged from .79 to .94.
In the present study, data from the VPPS have been used in analyses to account for the potent effect of the therapeutic alliance on client outcomes.

Coding Procedure. Raters for the process measures were the author, as well as three research assistants. The research assistants were trained to use the coding systems such that reliability could be calculated for the process measures. The second rater for the MS was a Ph.D. student in the Clinical Psychology program at Ryerson University. In terms of the TIL, the second rater was a student enrolled in the Master of Social Work program at the University of Toronto. Second raters for the MS and TIL had practical psychotherapy experience. The second rater for the VPPS was a recent graduate of the undergraduate Psychology program at the University of Toronto, with plans to pursue graduate studies.

Each rater worked with the author for one to two hours each week over the course of a 4-month semester. Training involved completing practice exercises provided by Hill (2004), Grenyer (1994), and O'Malley, Suh, & Strupp (1983), in addition to practice exercises developed by the author. Following this extensive training, 10% of the total coded sessions were randomly selected and used to calculate inter-rater reliability for the MS, the TIL, and the VPPS.

Data Analysis Plan

The data analysis plan presented below was used to guide the process of addressing the research objectives.

Descriptive and Preparatory Analyses. In order to begin understanding the data, the first phase of qualitative analyses focused on describing the adolescent participants, the therapists, and the transcribed therapy sessions. Inter-rater reliability calculations pertaining to the process measures are also reported as part of the descriptive and preparatory
analyses.

Additionally, preliminary analyses were conducted to determine whether the clients in the present study showed signs of improvement following SET. Line graphs were used to explore the trajectory of changes for each participant, with respect to pre- and post-therapy scores on the BDI and MASC. In order to better appreciate the pertinence of the clients’ change in symptoms, the mean group BDI / MASC scores (pre- and post-therapy) were compared to mean scores for previously studied groups of depressed / anxious adolescents (Mufson et al., 2004; Rice, 2008).

In the event that the graphs suggested a notable decrease in depression / anxiety symptoms following SET, paired t-tests (two-tailed) were planned to determine whether there was a significant difference between pre- and post-therapy scores on the questionnaire measures. Eight participants from the present study could be included in the t-test focusing on symptoms of depression. In order to determine the minimum effect size likely to be detected with a sample size of 8, a power analysis was conducted using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007). The alpha level was set at .05. To achieve a power of .80 with a sample size of 8, a large effect size (d = 1.16), would be required to detect a significant difference. A number of open trials of SET produced large pre-post effect sizes (0.89 to 2.85) in addressing particular psychological dysfunctions (Leichsenring & Leibing, 2007). Two of these trials investigated the use of SET for adults with chronic depression, major depression, and/or depression with a concomitant personality disorder. Given these previous results, it is likely that the pre-post effect size in this study will yield an effect size large enough to be detected by a paired t-test. However, if this study shows non-significant results, it is possible that a small or medium effect size

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14 An evaluation of the effectiveness of SET is beyond the scope of the present thesis, however a larger study effectiveness study is currently in progress (Wilansky-Traynor, 2010).
exists, which would not be detectable given the present sample size.

Six participants from the present study could be included in the t-test assessing the change in symptoms of anxiety. Using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007), a power analysis was conducted with the alpha level set at .05. To achieve a power of .80 with a sample size of 6, a large effect size (d = 1.43), would be required to detect a significant difference. Once again, past research suggests that such a large effect is possible, with one study finding that SET produced a strong effect size (d = 1.4) in the treatment of anxious adults (Crits-Christoph et al., 1996).

Research Question 1:

Developments in Interpersonal Mastery Over The Course of Therapy.

1. Do the clients’ narratives reflect continuous increases in interpersonal mastery across 4 time points in the therapeutic process (pre-therapy, session 5, session 10, and session 15)?

1a. For each client, does the mean interpersonal mastery score increase across the 4 time points?

Line graphs were used to explore the trajectory of changes for each participant across the 4 time points. In the event that line graphs suggested increased interpersonal mastery scores over time, paired t-tests (two-tailed) were planned to determine whether there was a significant difference between pre-therapy and late (session 10 or 15) therapy scores. Data from at least 8 participants were available for these analyses. Using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007), a power analysis was conducted with the alpha level set at .05. To achieve a power of .80 with a sample size of 8, a large effect size (d = 1.16), was required to detect a significant difference. The power
analysis revealed that, if t-test results were non-significant, a small or medium effect size might exist, which would not be detectable given the sample size of 8.

1b. For each client, does the proportion of higher-level mastery statements increase over the 4 time points? Likewise, does the proportion of lower-level mastery statements decrease across the 4 time points?

Graphical and statistical analyses were conducted to assess the proportions of high-level, mid-level, and low-level client statements over time (MS scores of 1-2, 3-4, and 5-6, will represent low, medium, and high levels of mastery, respectively). First, line graphs were used to explore potential trends in the proportion of high, mid, and low mastery scores for each participant across the 4 time points. If the graphs suggested that the proportion of high-level scores increased and/or the proportion of low-level scores decreased over time, then repeated measures ANOVAs were conducted to statistically evaluate whether there was a main effect of time. Data from at least 8 participants were available for these analyses. Using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007), a power analysis was conducted with the alpha level set at .05. To achieve a power of .80 with a sample size of 8, a large effect size (f = .46), was required for a significant difference to be detected. The power analysis revealed that, if ANOVA results were non-significant, a small or medium effect size might exist, which would not be detectable given the sample size of 8.

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15 Proportions of statements will be calculated by dividing the number of each type of statement (high, mid, or low) by the total number of client statements in a session.


Research Question 2:

The Effect of Therapist Statements on Interpersonal Mastery

2. Is the use of expressive therapeutic techniques (i.e., challenges, confrontations, and interpretations) associated with higher levels of interpersonal mastery in the client?

2a. In order to better understand the therapist intention data, this data will be visually inspected for possible temporal trends. It is expected that therapists will use more higher-order statements in the later sessions. For each client, does the mean therapist intention score increase over the course of therapy?

Line graphs were used to explore the trajectory of changes for each participant across the 4 time points (preparatory session, and sessions 5, 10, and 15). If the observed trend in the graphs suggested increased therapist intention scores over time, paired t-tests (two-tailed) were used to determine whether there is a significant difference between pre-therapy and late (session 10 or 15) therapy scores. Data from at least 8 participants were available for these analyses. Using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007), a power analysis was conducted with the alpha level set at .05. To achieve a power of .80 with a sample size of 8, a large effect size (d = 1.16), was required to detect a significant difference. The power analysis revealed that, if t-test results were non-significant, a small or medium effect size might exist, which would not be detectable given the sample size of 8.

2b. To better understand the therapist data, further analyses will be completed to determine if, for each therapist, the proportion of higher-level therapist intention scores increases from early to late therapy? Likewise, does the proportion of lower-level intention scores decrease over time?
First, line graphs were used to explore potential trends in the proportion of high, mid, and low TIL scores for each participant across the 4 time points (TIL scores of 1-5 will reflect a low expressive component, scores of 6 a medium expressive component, and scores of 7-9 a high expressive component).\textsuperscript{16} In the even that graphs suggested the proportion of high-level scores increased over time and/or the proportion of low-level scores decreased over time, then repeated measures ANOVAs were planned to statistically evaluate whether there was a main effect of time. Data from at least 8 participants were available for these analyses. Using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007), a power analysis was conducted with the alpha level set at .05. To achieve a power of .80 with a sample size of 8, a large effect size ($f = .46$), was required for a significant difference to be detected. The power analysis revealed that, if ANOVA results were non-significant, a small or medium effect size might exist, which would not be detectable given the sample size of 8.

\textit{2c. To better understand the potential link between higher-level therapist intentions and higher-level client mastery scores, the data will first be inspected for correlations. Do clients exhibit higher levels of interpersonal mastery during a therapy session in which the therapist uses more expressive statements?}

When all the data were collected, there were 38 therapy sessions to be evaluated. Scatterplots were run for the two variables (therapist expressive statements and mean client mastery) to visually inspect whether client mastery scores within a session were higher when more expressive statements were used by the therapist. In the event that the scatterplots suggested this trend, correlational analyses were planned to provide further

\textsuperscript{16} Proportions of statements will be calculated by dividing the number of each type of statement (high, mid, or low) by the total number of therapist statements in a session.
evidence for a relationship.

2d. In contrast with supportive interventions, do clients exhibit higher interpersonal mastery following certain expressive interventions (TIL codes of 7, 8, and 9)?

To further examine whether clients exhibited higher interpersonal mastery following an expressive intervention, the data were studied using a micro-analytic, sequential approach (Bakeman & Gottman, 1997). As in research question 2b, therapist scores were collapsed into 3 categories: high-, mid-, and low-level statements. Collapsing the codes was necessary because the number of categories in the data analysis would have otherwise been excessive, rendering the planned analyses unfeasible.

The first step in the sequential analysis called for the coded data to be extracted from the transcript in the form of therapist-client interaction sequences. Each interaction sequence involved an antecedent-consequent pair (Lag0-Lag1), in which each therapist statement was considered the antecedent (Lag0), while each subsequent client statement was considered the consequent (Lag1). Thus, the therapist-client data consisted of two-event sequences.¹⁷

The second step in the sequential analysis involved the creation of transitional probability matrices for each session (i.e., for each client, 4 matrices were generated representing the four time points being studied). These matrices contained data about the probability of various interaction sequences taking place. Each cell in a matrix represented probability that a particular sequence occurred (e.g., the probability that a high-level therapist statement was followed by high-level client mastery statement). The main purpose

¹⁷ Therapist-client interaction sequences were limited to two-event sequences due to the limitations of the current sample size. Sequences composed of more than 2 events involve a great number of possible combinations to be considered, and extensive amounts of data would be required to support any data analyses.
of these matrices was to provide a visual display, allowing the viewer to see which interaction sequences were most likely and least likely to occur. Lag sequential analyses were then conducted for each client and each session, to determine whether evidence for the hypothesized trends was present at the client level. In the event of relevant and significant trends, a log-linear analysis was planned to confirm whether patterns were present in the sample as a whole.

Using a statistical software package (Faul, Erdfelder, Lang, & Buchner, 2007), a power analysis was conducted to determine the minimum detectable effect size for each individual lag sequential analysis (two-way contingency table analysis). To achieve a power value of .80 with a sample size of 205 (the minimum sample size in the present study), and a significance level of .05, a small effect size ($w = .24$), would allow for significant results to be detected. Due to the capacity to detect even a small effect size, it was unlikely that negative findings could be attributed to a limited sample size. A power analysis was also completed to determine the feasibility of conducting a log-linear analysis. Based on the recommendations of Giles (2002), the minimum sample size to complete a log-linear analysis should be roughly equal to 4 or 5 times the number of cells in the contingency table. In the present study, the estimated sample size was 3800 (approximately 100 data sequences for each of 38 sessions). This sample size would be adequate, given the formula outlined by Giles (2002).^18

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^18 The number of cells in the contingency table is expected to be 342 (38 sessions x 3 TIL categories x 3 MS categories). Based on Giles’ (2002) formula, the minimum number of sequences to be coded would be 1710 (5 x 342).
Chapter 5

Results

As described above, the present study sought to further our understanding of the process of therapeutic change through the study of client interpersonal mastery and therapist expressive techniques. Chapter 5 is divided into sections which parallel the various steps outlined in the data analysis plan. The first section provides the results of descriptive and preparatory analyses, conducted for the purpose of better understanding the participants, the therapy sessions, and the process measures utilized in the study. The second section provides preliminary data regarding the effectiveness of SET for adolescents with mood and/or anxiety disorders. Next, the chapter provides the results of the graphical and statistical analyses corresponding to the two major research questions, including a summary of key findings for each question. Lastly, the chapter reports the results of additional, exploratory analyses undertaken to better understand the results of the planned research questions.

**Descriptive and Preparatory Analyses**

*Participants.* As described in the Methods chapter, 10 adolescents constituted the sample for the present study. At the onset of their treatment, the age of the participants ranged from 15.17 to 18.11 years, with the mean age being 16.83 years ($SD = .87$ years). Of the participants who provided information on race in the questionnaire package ($n = 9$), the majority (88.9%) were Caucasian.

Prior to the onset of therapy, all participants ($n = 10$) had current diagnoses of at least one mood disorder – major depressive disorder (MDD) and/or dysthymic disorder (DD)
– with the exception of one client, who met criteria for a past MDD. The majority of participants (80%) had at least one comorbid anxiety diagnosis (generalized anxiety disorder, social phobia, panic disorder, and/or specific phobia), while a smaller number (20%) had comorbid mood disorders (MDD and DD). A minority of clients (20%) had more than 2 diagnoses. See Table 4 for a more detailed breakdown of the participants’ diagnoses.

As part of the questionnaire package given to participants, parents of the clients were asked to indicate their household income, level of education, and occupation. Based on those participants for whom household income was reported (n = 9), the family income ranged from $10,000-$15,000 to greater than $100,000 per year, with a median of $50,000-$60,000 per year. Information on mother’s educational level was available for all participants, and most mothers (60%) had completed at least some post-secondary education. Based on those participants for whom father’s level of education was provided (n = 9), the vast majority (95%) of fathers had completed at least some post-secondary education. The Socio-Economic Status (SES) of the participants was calculated using the Barratt Simplified Measure of Social Status (BSMSS; Barratt, 2006). The BSMSS consider both occupation and level of education, and scores range from 8 to 66, with higher scores representing a higher level of SES. Based on those participants for whom parental education and occupation was provided (n = 9), a mean SES score of 38.25 (SD = 11.81) was calculated, corresponding to class III – skilled craftsmen, clerical workers, and sales workers (Hollingshead, 1975).

Descriptive statistics were calculated for the 6 study non-completers, in order to take into consideration potential differences between these adolescents and those

\footnote{In the present thesis, the term ‘non-completers’ refers to those adolescents who did not complete treatment or could not be included in the analyses for other reasons.}
constituting the research sample. At the time of recruitment, the age of non-completers ranged from 14.54 to 22.4 years, with the mean age being 17.52 years (SD = 2.73 years). Of those who provided information on race in the pre-therapy questionnaire package (n = 6), the majority (67.0%) were Caucasian. Of the non-completers with available data (n = 5), most participants (n = 4) had current diagnoses a mood disorder – major depressive disorder (MDD) and/or dysthymic disorder (DD) – while one client met criteria for a past mood disorder. Some of the non-completers (40%, 2/5) had at least one comorbid anxiety diagnosis (generalized anxiety disorder and/or social phobia), and one adolescent was diagnosed with anorexia nervosa, in partial remission. A minority of non-completers (20%, 1/5) had more than 2 diagnoses. Based on the non-completers for whom parental education and occupation was provided (n = 3), a mean SES score of 49.12 (SD = 7.28) was calculated, corresponding to class IV – minor professionals, technical workers, and medium business proprietors (Hollingshead, 1975).

Completers and non-completers were compared on various measures to rule out significant differences between the groups. Potential differences between group means were evaluated for descriptive measures (i.e., age, SES), and measures of symptom severity (i.e., pre-therapy BDI and MASC scores). T-test results indicated that the groups did not significantly differ with respect to age (t(14) = .75, p = .46), SES (t(10) = 1.48, p = .17), pre-therapy BDI score (t(13) = .34, p = .74), or pre-therapy MASC score (t(14) = .98, p = .34).

**Transcribed Therapy Sessions.** A total of 38 transcribed SET sessions were available for the purposes of completing the planned analyses. See the Methods chapter for more detail regarding the transcribed sessions. On audiotape, these therapy sessions
varied between 45 and 60 minutes in length. On paper, the transcribed sessions varied considerably with respect to the number of statements exchanged between the therapists and clients. Other research projects have reported similar, great variation in the number of total statements in a therapy session, as well as the number of codable statements (Copeland, 1995). Descriptive statistics pertaining to the number of coded client and therapist statements per session are presented in Table 5. Similar statistics about the uncodable statements are provided in Table 6.

As described in the Methods chapter, the VPPS was scored for each client at Session 5 and 10 to assess of the quality of the therapeutic relationship for each client-therapist dyad. Descriptive statistics on the various subscales of the VPPS are provided in Table 7. To better understand the therapeutic alliance for each client-therapist dyad, Figure 1 summarizes the total VPPS scores calculated for each dyad. As is apparent in Figure 1, VPPS scores are, by and large, similar across clients and sessions. However, in contrast with the group as a whole, two clients stand out: Client A has noticeably lower VPPS scores both at Session 5 and 10, and Client G has a markedly lower VPPS score at Session 5.

Inter-Rater Reliability

Mastery Scale. Inter-rater reliability was calculated using both the exact and adjacent methods described by Zarcone et al. (1991). In the exact method, an agreement was scored only when the two raters had selected exactly the same score for a given client statement (e.g., both raters scored a particular client statement as 1A). With the adjacent method, however, an agreement was scored if the raters selected ratings in the same hierarchical level (level 1, 2, 3, 4, 5, or 6). That is, if one rater had scored a statement as 1A, an agreement would occur if the other rater had assigned the same statement a score of
Percentage agreement was calculated using the following formula: \( \frac{\text{Agreements}}{\text{Agreements} + \text{Disagreements}} \times 100\% \).

Percentage agreement was calculated across two raters for just over 10%, or 4 sessions, of the 38 total sessions included in the study. Exact agreement ranged from 63 to 77%, with a mean of 72%. With the adjacent method, agreement ranged from 80 to 84%, with a mean of 82%.

In some of the planned analyses, scores on the mastery scale would be categorized to reflect high, medium, and low levels of mastery (i.e., scores of 1-2, 3-4, and 5-6, will represent low, medium, and high levels of mastery, respectively). Inter-rater reliability was therefore calculated to assess the degree to which the two raters had selected scores in the same hierarchical categories of high, medium, and low. As with the analyses of inter-rater reliability described above, the calculation was based on the data from 4 therapy sessions. Inter-rater agreement on the classification of statements as high, medium, or low, ranged from 83 to 88%, with a mean of 85%.

*Therapist Intentions List.* Inter-rater reliability was computed in the same manner (exact and adjacent rater agreement) as for the MS reliability calculations. In the exact method, an agreement was scored only when the two raters had selected exactly the same score for a given therapist statement (e.g., both raters scored a particular therapist statement as 6a-s).

In contrast to the MS codes, the TIL codes contain three levels of information about each coded statement: the type of therapist intention (using numerical values of 1 to 9), the context of the statement (coded a, b, or c), and the focus of the statement (coded s, o, or w). Due to the complexity of the TIL codes, two different types of adjacent agreement were
coded. In method A, agreement was scored if raters selected the same numerical score for a given therapist intention, regardless of context and focus codes assigned to the statement. That is, if one rater had scored a statement as 6a-s, an agreement would occur if the other rater had assigned the same statement a score of 6a-s, 6a-o, 6a-w, 6b-s, 6b-o, 6b-w, 6c-s, 6c-o, or 6c-w. In method B, agreement was scored if raters selected the same numerical score, or if they were within one point of each other. That is, if one rater had scored a statement as 6a-s, an agreement would occur if the other rater had assigned the same statement a numerical score of 5, 6, or 7 (regardless of the context and focus codes assigned to the statement).

The percentage agreement was calculated using the data from 4 therapy sessions (4 therapy sessions constituted slightly more than 10% of the total TIL data). Exact agreement ranged from 43 to 70%, with a mean of 56%.20 Using adjacent method A, agreement ranged from 76 to 85%, with a mean of 75%. Using adjacent method B, agreement ranged from 82 to 86%, with a mean of 84%.

In some of the planned analyses, TIL scores will be categorized to reflect high, medium, and low levels of expressive function (i.e., scores of 1-5 reflect a low expressive component, 6 reflects a medium expressive component, and 7, 8, 9 reflect a high expressive component). Inter-rater reliability was therefore calculated to assess the degree to which the two raters had selected scores in the same hierarchical categories of high, medium, and low. As with the analyses of inter-rater reliability described above, the calculation was based on the data from 4 therapy sessions. Inter-rater agreement on the classification of

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20 The exact method yielded a low reliability estimate because exact agreement scores required complete agreement on all 3 levels of the TIL code: type of intervention, context of intervention (i.e., the statement was / wasn’t part of discussion of a relationship episode, or was / wasn’t part of a discussion about the ‘here-and-now’), and the focus of the intervention (i.e., the statement focused on the Response of Self, Response of Other, or the client’s Wish). In contrast, the adjacent agreement calculations did not require exact agreement across all 3 levels of the TIL code.
statements as high, medium, or low, ranged from 74% to 87%, with a mean of 78%.

Vanderbilt Psychotherapy Process Scale. Inter-rater reliability was calculated using
the Spearman correlation coefficient, a nonparametric test intended to be used on ranked
variables.

VPPS data from 2 therapy sessions was used to calculate the inter-rater reliability (2
therapy sessions constituted 10% of the total VPPS data). Based on the reliability analyses
of the data with Spearman’s rho, rank correlations ranged from .82 (p < 0.0001) to .98 (p <
0.0001), with a combined Spearman’s rho of .90 (p < 0.0001).

Changes in Symptoms Following SET

As stated above, a larger study investigating the effectiveness of SET with
depressed / anxious adolescents will provide comprehensive data regarding symptomatic
changes in adolescent clients (Wilansky-Traynor, 2010). The purpose of the preliminary
analyses below is to determine whether the clients in the present study showed signs of
improvement following SET.

The line graph presented in Figure 2 depicts the pre-and post-therapy levels of
depressive symptoms (as measured by the BDI) for each patient with a diagnosis of a
depressive disorder. Data on depressive symptoms was available for 8 out of 10
participants with depressive disorders. As shown in the line graph, all 8 participants
experienced a drop in depressive symptoms. In order to better understand the relevance of
this drop in symptoms, the mean BDI scores for the group (pre- and post-therapy) were
compared to the mean BDI scores for a group of depressed adolescents studied by Mufson
et al. (2004). The latter study investigated the efficacy of interpersonal therapy (an
intervention similar to SET), with results indicating that interpersonal therapy is an effective
treatment for adolescent depression. Figure 3 depicts the means and standard deviations for the two groups. The data do suggest that the adolescents in our group experienced substantial improvements in depressive symptoms after completing SET. This graphical analysis provides evidence that SET might be similar in its effectiveness to IPT in the treatment of adolescent depression.

Given that the abovementioned graphs and calculations suggested a notable decrease in depressive symptoms following SET, a paired-samples t-test (two-tailed) was conducted to determine whether there was a significant difference between pre- and post-therapy scores on the BDI. Eight out of 10 participants from the present study were included in this analysis. The results indicated the mean pre-therapy scores on the BDI (M = 21.75, SD = 5.57) were significantly higher than the mean post-therapy scores (M = 10.25, SD = 6.96), t(7) = 4.29, p < .01. In accordance with the study hypotheses, these results demonstrate the adolescent clients experienced significant improvements in depressive symptoms following SET.

Data on anxious symptoms was available for 6 out of 8 participants with anxiety disorders. The line graph presented in Figure 4 depicts the pre-and post-therapy levels of anxious symptoms (as measured by the MASC) for each patient with a diagnosis of an anxiety disorder. As shown in the line graph, 5 participants experienced a drop in anxious symptoms, while one client’s symptoms remained the same pre- and post-therapy. In order to better understand the relevance of the decrease in anxious symptoms experienced by most of these clients, the mean MASC scores for the group (pre- and post-therapy) were compared to the mean MASC scores for a group of anxious youth studied by Rice (2008). The latter research studied the efficacy of three different interventions (CBT, relaxation training, and social skills training), with results suggesting greater improvements following
CBT and relaxation training in comparison to social skills training. Figure 5 depicts the means and standard deviations for the two groups. In comparison with the youth studied by Rice (2008), the adolescents in the present study experienced higher levels of anxiety pre-treatment. Nonetheless, in comparing the slopes of the lines for each group, it is clear that the slope is steepest for the SET and CBT groups. The graph therefore suggests that SET might be similar in its effectiveness to CBT in the treatment of adolescent anxiety. Moreover, the graph suggests the adolescents in our group experienced substantial improvements in anxious symptoms.

The graphs and calculations presented above reflect a notable decrease in anxiety symptoms following SET. In order to determine whether there was a significant difference between pre- and post-therapy scores on the MASC, a paired-samples t-test (two-tailed) was conducted. Six participants from the present study could be included in this analysis. The results indicated the mean pre-therapy scores on the MASC (M = 59.50, SD = 7.40) were significantly higher than the mean post-therapy scores (M = 50.83, SD = 9.45), t(5) = 2.73, p < .05. In accordance with the study hypotheses, these results demonstrate the adolescent clients experienced significant improvements in symptoms of anxiety following SET.

Results Pertaining to Research Question 1:

*Developments in Interpersonal Mastery Over The Course of Therapy*

1. Do the clients’ narratives reflect continuous increases in interpersonal mastery across 4 time points in the therapeutic process (pre-therapy, session 5, session 10, and session 15)?

1a. For each client, does the mean interpersonal mastery score increase across the 4
Line graphs (see Appendix B) represent, for each of the 10 clients, the trajectory of MS scores across the 4 time points (or 3 points in time). These graphs depict, in red, mean MS scores during each of the four pre-selected sessions: pre-therapy, session 5, session 10, and session 15. Visual inspection of these graphs revealed that, contrary to expectations, there was no clear increase in mean MS scores over time. Of the 9 clients with relevant data, 55.6% (Clients C, E, G, H, and I) exhibited visibly higher mean MS scores at the last time point (session 15 for most clients, and session 10 for client H), in comparison to pre-therapy. Hence, the probability of clients exhibiting a higher mean MS score at session 15 was no greater than chance. Given that the information in the graphs disproved the hypothesis, further analysis of MS means was unwarranted.

1b. For each client, does the proportion of higher-level mastery statements increase over the 4 time points? Likewise, does the proportion of lower-level mastery statements decrease across the 4 time points?

Although the MS data did not reveal continuous increases in mean MS scores over time, it is possible that information was lost in the process of averaging MS scores. Therefore, in addition to considering mean scores, the proportions of high-level, mid-level, and low-level client statements over time were also analyzed.

MS scores were first categorized to reflect high, medium, and low levels of mastery (i.e., scores of 5-6, 3-4, and 1-2, would represent high, medium, and low levels of mastery, respectively). Bar graphs (see Appendix C) illustrate the proportion of high, mid, and low statements across time.

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21 Only 3 sessions were available for clients H and J, therefore these clients could not be included in all analyses. For this reason, some analyses are completed with data from 8 or 9 participants, rather than all 10 participants.

22 Proportions of statements are calculated by dividing the number of each type of statement (high, mid, or low) by the total number of client statements in a session.
mastery scores for each participant at 4 points in time. Visual inspection first focused on the proportion of high-level MS scores over time, and graphical analyses provided some evidence of the hypothesized trend. Of the 9 clients with relevant data, 55.6% (Clients C, E, G, H, and I) exhibited a visible increase in the proportion of high-level MS scores at the last time point (session 15 for most clients, and session 10 for client H), in comparison to pre-therapy. Of all 10 participants, one client (client C) exhibited continuous increases in the proportion of high-level MS scores over all time-points, and 3 clients (A, G, and H) exhibited continuous increases over 3 consecutive time-points (sessions 5, 10, and 15). Although the majority of clients did not demonstrate continuous increases over 3 or 4 time-points, 66.7% (6 out of 9 clients) demonstrated clear increases in the proportion of high-level scores between pre-therapy and session 5.

Visual inspection next focused on the proportion of low-level MS scores over time. Graphical analyses provided some evidence of the hypothesized trend in low-level scores. Of the 9 clients with relevant data, 77.8% (Clients A, C, E, F, G, H, and I) exhibited a visible decrease in the proportion of MS scores at the last time point (session 15 for most clients, and session 10 for client H), in comparison to pre-therapy. Of all 10 participants, one client (client H) exhibited continuous decreases in the proportion of low-level MS scores over all time-points, and 4 clients (A, C, F, and G) exhibited continuous decreases across 3 consecutive time-points. Although the majority of clients did not demonstrate continuous decreases over 3 or 4 time-points, 66.7% (6 out of 9 clients) demonstrated clear decreases in the proportion of low-level scores between pre-therapy and session 5. With respect to the proportions of mid-level scores over time, no obvious trends were observed.

Given that the graphical analyses of the proportions of MS scores partially supported the hypotheses, further analyses were warranted. A two-way, repeated measures ANOVA
was conducted to evaluate the effect of time on MS scores. Eight participants could be included in this analysis. Due to the great variability in the verbosity of clients, it was essential to analyze proportional values rather than frequency values. Therefore, the Mastery Level data consisted of percentages (i.e., percentages of high-, mid-, and low-level statements to total client statements at each point in time). The ANOVA within-subjects factors were Time with 4 levels (pre-therapy, session 5, session 10, and session 15), and Mastery Level with 2 levels (high, and low-level scores). Mid-level MS scores were excluded from the two-way ANOVA for the following reasons: (1) because, in accordance with hypotheses, graphical analyses did not reveal notable trends in mid-level scores, and (2) because one of the assumptions underlying a two-way, within-subjects ANOVA would be violated if mid-level scores were included.\(^{23}\)

As part of the ANOVA, descriptive statistics were obtained, which provided evidence for the hypothesized trends. More specifically, the mean percentage of high-level scores increased across time points 1, 2, and 4 (see Figure 6a). Furthermore, the mean percentage of low-level scores decreased across time points 1, 2, 3, and 4 (see Figure 6b). The interaction effect of Time x Mastery Level was tested using the multivariate criterion of Wilk’s lambda (\(\Lambda\)). The multivariate eta square (\(\eta^2\)) was used to calculate the effect size. Contrary to the hypothesis, the interaction effect was not significant, \(\Lambda = .64, F(3, 5) = .95, p = .48, \eta^2 = .36\). Main effect of Time (\(\Lambda = .47, F(3, 5) = 1.86, p = .25, \eta^2 = .53\)) and Mastery Level (\(\Lambda = .96, F(3, 5) = .31, p = .60, \eta^2 = .04\)) were also not significant, although non-significance of main effects was expected. Although the ANOVA results were not significant for the interaction effect and the main effect of time, the effect sizes for these

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\(^{23}\) One assumption of a repeated measures ANOVA is that no dependency exists in the scores aside from the dependency introduced by having the same individuals produce multiple scores. Given that percentage data were used in the present analysis, the use of data from all 3 MS levels (high-, mid-, and low-) would violate the independence assumption.
effects were large. This suggests that these analyses were performed under low power, and with a larger sample, the latter results would be significant.

**Summary of Results from Question 1.** Graphical analyses of the client data were conducted with the purpose of detecting trends over time. Line graphs plotted for each client revealed unsystematic changes in mean MS scores over the 4 time points. The line graphs did not provide support for the hypotheses outlined for question 1a, which predicted increases in mean MS scores over time.

Next, potential changes in the proportions of high-level versus low-level MS scores were considered. Bar graphs plotted for each client demonstrated that 6 out of 9 clients (66.7%) displayed a visible increase in the proportion of high-level scores between pre-therapy and session 5. Moreover, 6 out of 9 clients (66.7%) exhibited a visible decrease in the proportion of low-level scores between pre-therapy and session 5. For the same percentage of clients (66.7%), a visible decrease in the proportion of low-level scores was observed between pre-therapy and session 15. The bar graphs therefore reflected patterns consistent with the hypotheses outlined for question 1b. Despite this graphical evidence of predicted trends, a statistical analysis (ANOVA) did not find significant differences in the high- and low-level scores over time. Nonetheless, the descriptive statistics calculated as part of the ANOVA revealed a pattern of greater proportions of high-level scores over time, as well as smaller proportions of low-level scores. Additionally, a large effect size was obtained with respect to the interaction effect of Time x Mastery level, suggesting that the ANOVA was performed under low power. With a larger sample, the interaction effect would likely have been significant. Therefore, the observed trends were in the same direction as the hypotheses for question 1b.
Results Pertaining to Research Question 2:

The Effect of Therapist Statements on Interpersonal Mastery

2. Is the use of expressive therapeutic techniques (i.e., challenges, confrontations, and interpretations) associated with higher levels of interpersonal mastery in the client?

2a. In order to better understand the therapist intention data, this data will be visually inspected for possible temporal trends. It is expected that therapists will use more higher-order statements in the later sessions. For each therapist, does the mean therapist intention score increase over the course of therapy?

Line graphs (see Appendix B) represent, for each therapist, the trajectory of mean TIL scores across the 4 time points (or 3 points in time): pre-therapy, session 5, session 10, and session 15. In these graphs, mean TIL scores are depicted in blue. Visual inspection of the graphs provided some evidence of an increase in TIL scores over time. Of the 9 therapists included in this analysis, 77.8% (clients A, B, C, E, F, G, and I) exhibited visibly higher mean TIL scores at the last time-point (session 15 for most clients, and session 10 for client H), in comparison to pre-therapy. Interestingly, based on the graphs, the greatest increase in TIL scores took place between the pre-therapy session and session 5. Of the 9 therapists, 77.8% exhibited visibly higher mean TIL scores at session 5, in comparison to pre-therapy.

The graphs also revealed a noteworthy trend regarding the occurrence, in time, of the

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24 It should be noted that, although 10 therapists are described in the analyses, there were in fact only 9 different therapists. The labels ‘B’ and ‘G’ describe the same person.

25 Only 3 time points were available for clients H and J, therefore these clients could not be included in all analyses. For this reason, some analyses are completed with data from 8 or 9 participants, rather than all 10 participants.

26 The last time point was session 15 for all clients except client H, for whom it was session 10.
lowest mean TIL score. For 5 therapists, (B, E, F, G, and I), the lowest mean score clearly occurred in the pre-therapy session. In contrast, the lowest TIL score visibly occurred in session 10 or session 15 for only 2 therapists (therapist H and J, respectively). For 3 therapists (client A, C, and D), mean TIL scores were very similar at some points in time, making it difficult to determine, based on the graph, at which point in time the lowest score occurred.

Further inspection of the graphs revealed several therapists (B, E, F, G, and I) showed similar trajectories of mean TIL scores. In addition to exhibiting a visibly lower TIL score in the pre-therapy session, each of these therapists displayed a spike in mean TIL score in session 5 (as compared with the pre-therapy session). Therapists G and I then plateaued, with no further visible changes in mean TIL scores. Therapist E’s mean TIL scores also plateaued from session 5 to 10, but then dipped in session 15. Therapists B and F exhibited further increases in TIL scores over time, with peaks occurring at session 10, and slight dips at session 15. Overall, with respect to the 5 similar therapists – B, E, F, G, and I – visual inspection of the graphs provided some evidence that TIL scores increased over the course of therapy, with slight dips often occurring in session 15.

In order to evaluate the significance of the difference between early (pre-therapy) and late (sessions 10 and 15) TIL scores, paired-samples t-tests (two-tailed) were conducted. The first t-test considered the difference in TIL means between pre-therapy and session 10. Nine participants could be included in this analysis. The coefficient of determination ($r^2$) was used to calculate the effect size. Results indicated the mean TIL scores at session 10 (M = 5.12, SD = .65) were significantly higher than pre-therapy mean scores (M = 4.39, SD = .16), t(8) = 3.61, p < .01, $r^2 = .62$. The second t-test considered the difference in TIL means between pre-therapy and session 15. Eight participants could be included in this analysis.
Results indicated the mean TIL scores at session 15 (M = 5.08, SD = .47), were significantly higher than pre-therapy mean scores (M = 4.41, SD = .15), t(7) = 3.30, p < .05, r² = .61. In accordance with the study hypotheses, t-test results suggested higher TIL scores later in the therapy process.

2b. To better understand the therapist data, further analyses will be completed to determine if, for each therapist, the proportion of higher-level therapist intention scores increased from early to late therapy? Likewise, does the proportion of lower-level intention scores decrease over time?

The mean scores graphed in 3a possibly obscure the full breadth of the change occurring in therapist statements over the course of therapy. Therefore, in addition to considering mean scores, changes in the proportions of high-level and low-level therapist statements were also considered.

TIL scores were first categorized to reflect high, medium, and low levels of expressive function (i.e., scores of 1-5 reflect a low expressive component, 6 reflects a medium expressive component, and 7, 8, 9 reflect a high expressive component). Bar graphs (see Appendix D) illustrate the proportion of high, mid, and low TIL scores for each therapist across all points in time. Visual inspection of these graphs provides evidence for the hypothesized trend. Of the 9 therapists with relevant data, 100% exhibited a visible increase in the proportion of high-level TIL scores at the last time point (session 15 for most clients, and session 10 for client H), in comparison to pre-therapy. Of the same therapists, 100% also exhibited a visible increase in the proportion of high-level scores between pre-therapy and session 5. Moreover, 6 out of 9 therapists, (66.7%; therapists A, B, C, D, F, and I) exhibited a clear, gradual increase in the proportion of high-level TIL scores across the first 3 time-points (pre-therapy, session 5, and session 10). The hypothesized increase
in high-level scores was robust across the first 3 time-points. In contrast, of the 6 therapists with increasing scores across the first 3 time-points, 4 therapists displayed a visible decrease in the proportion of high-level scores between sessions 10 and 15. The data suggested therapists did not use as many high-level expressive statements in session 15.

With respect to low-level TIL scores, the graphs also provided some evidence of the hypothesized trend. Of the 9 therapists with relevant data, 66.7% (therapists A, B, E, F, G, and I) exhibited a visible decrease in the proportion of low-level TIL scores at session 10, in comparison to pre-therapy. The trend was less robust between session 15 and the pre-therapy session, with 50% of therapists (4 out of 8 therapists) displaying a visible decrease in the proportion of low-level statements. One of the therapists (therapist F) exhibited continuous decreases in the proportion of low-level TIL scores over all time-points, while 5 therapists (B, C, E, G, and I) exhibited continuous decreases across 3 time-points. Although many therapists did not demonstrate continuous decreases over 3 or 4 time-points, 66.7% (6 out of 9 therapists) demonstrated clear decreases in the proportion of low-level scores between pre-therapy and session 5. As with the high-level scores, the hypothesized trend in low-level scores appeared to be more robust across the first 3 time-points.

Given that the graphical analyses provided substantial support for the hypotheses, further analyses were warranted. A two-way, repeated measures ANOVA was conducted to evaluate the effect of time on TIL scores. Eight participants could be included in the analysis. Due to the great variety in the number of codable statements from session to session, it was essential to analyze proportional values rather than frequency values. Therefore, the TIL data consisted of percentages (i.e., percentages of high-, mid-, and low-level statements to total client statements at each point in time). The ANOVA within-subjects factors were Time with 4 levels (pre-therapy, session 5, session 10, and session
15), and TIL with 2 levels (high-, and low-level scores).

As part of the ANOVA, descriptive statistics were obtained, which provided evidence for the hypothesized trends. More specifically, the mean percentage of high-level scores increased substantially across time points 1, 2, 3, and 4 (see Figure 7a). Furthermore, the mean percentage of low-level scores decreased substantially across time points 1, 2, and 3 (see Figure 7b). The interaction effect of Time x TIL Level was tested using the multivariate criterion of Wilk's lambda ($\lambda$). In accordance with the hypothesis, the interaction effect was significant, $\Lambda = .08$, $F(3, 5) = 20.28$, $p < .01$, $\eta^2 = .92$. Results also revealed a significant main effect of TIL Level ($\Lambda = .05$, $F(1, 7) = 134.31$, $p < .001$, $\eta^2 = .95$), although this finding was not anticipated, nor pertinent to the research questions. Main effect of Time ($\Lambda = .31$, $F(3, 5) = 3.65$, $p = .10$, $\eta^2 = .69$) was not significant, but non-significance was expected.

Paired sample t-tests (two-tailed) were then conducted to follow up the significant interaction. In order to minimize familywise error, paired t-tests were limited to those trends most likely to be significant given the graphical analyses. More specifically, for both high-level and low-level scores, the mean percentage differences were examined between (1) pre-session and session 15, as well as (2) pre-session and session 5. As part of the paired t-test analyses, familywise error rate across these tests was controlled for using Holm’s sequential Bonferroni approach.\(^{27}\) The coefficient of determination ($r^2$) was used to calculate the effect size. Results indicated the mean percentage of high TIL scores in session 15 ($M = 22.44$, $SD = 8.12$) were significantly higher than pre-therapy mean scores ($M = 1.01$, $SD = .90$), $t(7) = 7.29$, $p < .001$, $r^2 = .88$. The mean percentage of high TIL scores in session 5 ($M = 16.86$, $SD = 11.80$) were also significantly higher than pre-therapy mean scores ($M = 1.13$, $SD = .88$), $t(8) = 3.89$, $p < .01$, $r^2 = .65$. These results supported the hypothesis that the

\(^{27}\) The $\alpha$ level was set at .0125 ($\alpha$ of .05 / 4).
percentage of high-level statements would increase over time.

With respect to differences in the percentage of low TIL scores over time, t-test results indicated the mean percentage of low TIL scores in session 15 (M = 35.26, SD = 12.22) were not significantly lower than pre-therapy mean scores (M = 38.68, SD = 4.57), t(7) = .68, p = .52, r² = .06. Similarly, the mean percentage of low TIL scores in session 5 (M = 35.22, SD = 11.78) were not significantly lower than pre-therapy mean scores (M = 38.68, SD = 4.27), t(8) = .75, p = .48, r² = .06. The latter findings contradicted the hypothesis that the percentage of low-level statements would decrease over time.

2c. To better understand the potential link between higher-level therapist intentions and higher-level client mastery scores, the data will be inspected for correlations. Do clients exhibit higher levels of interpersonal mastery during a therapy session in which the therapist uses more expressive statements?

The data from 38 therapy sessions were available to address the above research question. First, scatterplots were run for the two variables, to visually inspect whether client mastery scores within a session are higher when more expressive statements are used by the therapist. Separate scatterplots were run to explore trends between mean MS and TIL scores (Figure 8a), and between the percentage of high-level MS and TIL scores (Figure 8b). The scatterplots did not suggest that higher levels of interpersonal mastery occurred in sessions where therapists used more expressive (i.e., higher level) statements. Due to the absence of a notable relationship between the two variables, correlational analyses were not warranted.

2d. In contrast with supportive interventions, do clients exhibit higher interpersonal mastery following certain expressive interventions (TIL codes of 7, 8, and 9)?

This question was addressed using a lag sequential method (Bakeman & Gottman,
1997). To examine whether higher-level client statements followed expressive interventions, it was first necessary to extract the coded data from the transcripts in the form of therapist-client interaction sequences. Each interaction sequence involved an antecedent-consequent pair (Lag0-Lag1), in which each therapist statement was considered the antecedent (Lag0), while each subsequent client statement was considered the consequent (Lag1). Thus, the therapist-client data consisted of two-event sequences, where the antecedent and consequent were operationally defined as follows: the antecedent statement was quantified as the highest-level TIL statement in the therapist’s speech turn, while the consequent statement was quantified as the highest-level MS statement in the client’s speech turn.

As part of the sequential analysis, transitional probability matrices were then created for each session. More specifically, for each client, a matrix was generated for each time-point (pre-therapy, session, 5, 10, & 15). These matrices contain data about the probability of various interaction sequences taking place. Each cell in a matrix represents probability that a particular sequence occurred (e.g., the probability that a high-level therapist statement is followed by high-level client statement). In order to orient the reader to the transition probability matrices (Figures 9a to j), the first figure will now be explained in more detail. Figure 9a depicts transition matrices for each of Client A’s therapy sessions. The blue cells indicate that, in Client A’s pre-therapy session (Figure 9a-a), a large proportion (0.68) of therapist statements were coded as 6, while a smaller proportion (0.28) were coded as 1, and a very small proportion were either not scorable (0.04) or coded as 7 (0.00). In this

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28 As in research question 2b, therapist scores were collapsed into 3 categories: high-, mid-, and low-level statements. Collapsing the codes was necessary because the number of categories in the data analysis would have otherwise been excessive, given the nested nature of the data.

29 It should be noted that, in the transitional probability matrices, the TIL ‘1’ column reflects supportive statements with codes 1 to 4.
session, the therapist did not use any statements corresponding to the codes of 5, 8, or 9.

In the transition diagram, each of the therapist codes is at the top of group of pink cells, which represent the different client statements. In Figure 9a-a, of the therapist statements coded as 6 (0.68), the majority were followed by level 3 client mastery statements (0.28), a smaller proportion were followed by level 2 statements (0.26), and an equal proportion were followed by level 1 statements (0.23) or unscorable client statements (0.23). Figure 9a-a reveals that for all therapist statements (with the exception of TIL codes of 7), client responses were most likely to be coded as level 3 mastery statements, as compared with level 2 or level 1 statements. With respect to unscorable statements, TIL codes of 1 were followed by the greatest proportion of unscorable client responses (0.52), while codes of 6 were followed by the smallest proportion of unscorable client responses (0.23).³⁰

A total of 38 transitional probability matrices (one for each of the transcribed therapy sessions) were created (Figures 9a to 9j). The main purpose of these matrices was to provide a visual display, allowing the viewer to see which interaction sequences are most likely to occur, and which are least likely to occur. A few trends were clearly visible upon inspection of all 38 matrices. Firstly, it was evident therapists used a very low proportion of certain codes (5, 8, and 9) across all sessions. The highest proportions of codes 5, 8, and 9, were .08, .10, and .06, respectively. When the latter codes were used, they tended to occur in later sessions. Another notable trend pertained to the TIL codes of 7. The matrices revealed therapists used very low proportions of 7s in the pre-therapy sessions, with the proportions increasing in the later sessions. This trend accounts for results obtained in Question 2a, indicating a significant increase in high-level therapist statements over time.

³⁰ It should be noted that TIL codes of 7 were never followed by unscorable client statements, therefore these codes were actually succeeded by the smallest proportion of unscorable statements. However, the body of the text states TIL codes of 6 were followed by the smallest proportion of unscorable statements because TIL codes of 7 occurred at an extremely low frequency (one occurrence).
In comparison to the therapist scores, the transitional probability matrices revealed greater spread in client scores; that is, unlike the therapist codes (of which there were low proportions of 5s, 8s, and 9s), there were substantial numbers of statements at each level of the mastery scale. However, overall, level 1 mastery scores tended to occur less frequently throughout the sessions, in comparison to level 2 and 3 scores. Also, as revealed in prior graphical analyses (see Question 1b), many clients displayed a slight trend toward fewer level 1 scores in later sessions, as compared to pre-therapy. The mastery scale data in the matrices were scanned to detect whether clients exhibited higher interpersonal mastery (level 3 codes) following higher-level expressive interventions (TIL codes of 7, 8, or 9) in contrast to supportive interventions (TIL codes of 1). Interestingly, clients tended to exhibit relatively high proportions of level 3 mastery scores in response to both supportive and expressive interventions. However, clients appeared to display slightly higher proportions of level 3 mastery scores in response to certain expressive statements (TIL codes of 7) in contrast to supportive statements (TIL codes of 1). Moreover, clients appeared to display slightly lower proportions of level 1 mastery scores in response to certain expressive statements (TIL codes of 7) in contrast to supportive statements (TIL codes of 1).

Following the review of the transitional probability matrices, the data were prepared to run a series of two-way contingency table analyses (lag-linear analyses), as described in the data analysis plan. The data included in the contingency table analyses differed from the transitional probability data in a few ways. In contrast to the data in the matrices, the contingency table analyses omitted speech turn data containing a statement that was not scorable. Only scorable data were included in the dataset because the focus of the analyses was on determining differences in clients' responses to supportive versus expressive therapist statements. Also, TIL data were collapsed into the categories of high-,
mid-, and low-level scores in order to meet the power requirements of the analyses.

Contingency table analyses were planned for each client, and each session (38 analyses in total), with the purpose of statistically evaluating whether high-level MS scores (as opposed to low-level MS scores) were more likely to follow high-level TIL scores. The variables in each two-way contingency analysis were as follows: TIL score with three levels (high-, mid-, and low-level), and MS score with three levels (high-, mid-, and low-level). The 38 contingency table analyses were attempted, however results could not be obtained because one of the assumptions of the two-way contingency table analysis was violated; that is, for 78.79% of sessions (26 out of 33), more than 25% of the contingency table cells had expected frequencies less than 5. As noted in the description of the transitional probability matrices, the cells corresponding to high-level TIL statements tended to contain very low proportions of the total scores.

In order to address the issue of low cell proportions, the data for each client were collapsed across all 4 sessions. A series of two-way contingency table analyses were then conducted for each client (10 analyses in total). Each analysis involved a likelihood ratio chi-square test, where significant results indicate that certain observed cell frequencies are significantly different than expected. Each analysis also included Kendall’s tau-b test, which provides an estimate of effect size. For 7 out of 10 analyses, chi-square ($\chi^2$) values were significant ($\chi^2$ values ranged from 9.48 to 42.48, and $p$ values ranged from .000 to .05). Standardized residual values were then examined to determine where observed cell frequencies differed significantly from expected frequencies. With respect to the 7 clients with significant chi-square values, elevated standardized residuals (>= 2) were observed in a total of 10 cells. Of the 10 elevated standardized residuals, 4 provided support for the hypotheses, 4 did not directly apply to the hypotheses, and 2 contradicted the hypotheses.
(tau-b values ranged from -14.7 to 20.7). Results were therefore mixed, and did not clearly prove or disprove the hypotheses.

**Summary of Results from Question 2.** The therapist data were first studied with the purpose of identifying any trends over time. Line graphs plotted for each therapist suggested a tendency toward higher mean TIL scores in the later stages of therapy, in comparison to pre-therapy. Indeed, paired t-tests revealed significantly higher mean scores in sessions 10 and 15 versus pre-therapy, providing support for the prediction that mean TIL scores would be higher toward the end of therapy. The results of Question 2a suggested that, in accordance with the SET manuals (Luborsky, 1984; Book, 1998), therapists used more expressive statements in the later stages of therapy.

With respect to changes in the proportions of high-level versus low-level TIL scores, bar graphs plotted for each therapist revealed a visible *increase* in the proportion of high-level scores between pre-therapy and session 5, as well as between pre-therapy and session 15 for all therapists (100%). Bar graphs depicting low-level TIL scores over time provided some evidence of a *decrease* in low-level scores over the course of therapy. Of the 9 therapists included in the graphical analysis, 6 therapists (66.7%) exhibited a visible *decrease* in the proportion of low-level scores between pre-therapy and session 5, as well as between pre-therapy and session 10.

In accordance with the trends detected in the bar graphs, an ANOVA analysis revealed a significant interaction effect of Time x TIL level. Descriptive statistics reported as part of the ANOVA revealed a pattern of greater proportions of high-level scores and smaller proportions of low-level scores over time. The results of follow-up t-tests confirmed that significantly greater percentages of high-level statements occurred later in therapy, in contrast to pre-therapy. However, follow-up t-tests did not reveal significant differences
between the percentages of low-level TIL scores in later sessions, in comparison to pre-therapy. Taken together, the bar graph analyses and ANOVA results for Question 2b upheld the prediction that therapists would use greater proportions of higher-order expressive statements in the later stages of therapy. However, contrary to the hypotheses, therapists did not exhibit smaller proportions of supportive statements over time.

Following the identification of significant (and non-significant) trends in the TIL data, the effect of therapist statements on interpersonal mastery was investigated. Question 2c examined whether clients exhibited higher interpersonal mastery scores during a therapy session in which the therapist used more expressive statements. Scatterplots were plotted and, contrary to the hypothesis, the plots did not provide evidence of a notable relationship between higher MS scores and the use of expressive techniques.

Question 2d further explored the potential relationship between higher levels of interpersonal mastery and expressive techniques through the use of a sequential analysis. It was not possible to employ the exact data analysis plan for question 2d due to the very low frequencies of certain high-level TIL codes. However, it was possible to condense the data to conduct a lag sequential analysis for each client, across all sessions. Although the results revealed significant findings for 7 out of 10 clients, follow-up analyses were mixed, neither proving nor disproving the hypotheses. Hence, the findings did not provide enough evidence to support the prediction that higher levels of interpersonal mastery would occur in relation to higher-level therapist expressive techniques (versus supportive techniques).

Although the statistical analyses for question 2d did not uphold the hypothesis, the transitional probability diagrams produced as part of the planned analyses revealed some noteworthy trends relevant to the predictions: (1) TIL codes of 7 tended to occur at higher rates later in therapy, in comparison to pre-therapy, (2) low-level MS scores tended to occur
less frequently throughout the sessions (in comparison to mid-level and high-level MS scores), (3) low-level MS codes tended to occur in smaller proportions later in therapy, in comparison to pre-therapy, (4) clients appeared to display slightly greater proportions of high-level mastery scores in response to certain expressive statements (TIL codes of 7) in contrast to supportive statements (TIL codes of 1), and (5) clients appeared to display slightly smaller proportions of low-level MS scores in response to certain expressive statements (TIL codes of 7) in contrast to supportive statements (TIL codes of 1).

Exploratory Analyses

In the process of completing the planned analyses for the main research questions, two interesting patterns in the data were observed, which could add to our understanding of the process of change in SET. These patterns were therefore selected for further, exploratory analysis.

The first trend pertained to changes in specific MS codes over time. In question 1b, the percentage of high- and low-level MS scores were tracked over the course of SET, and examined with respect to noteworthy changes. Although statistical results did not confirm the hypothesized increases in high-level scores and decreases in low-levels scores, inspection of the raw data suggested that changes in specific MS codes might have occurred. In particular, it appeared that the percentage of the following codes might be increasing over time: 3L, which reflects clients’ positive struggle with difficulties, and 5Q, which reflects clients’ expressions of insight into repeating personality patterns of the self. Question 3a therefore examines, using statistical analyses, whether codes 3L and 5Q increase in percentage over time. It should be noted that the latter codes reflect meaningful clinical phenomena. Both codes denote important aspects of interpersonal mastery, and,
code 3L reflects engagement in the struggle to improve, a critical concept in the transtheoretical stages of change model (Prochaska, 1979; McConnaughy et al., 1983).

The second exploratory question pertains to the sequential analyses conducted as part of question 2d. The results of the sequential analyses did not demonstrate that clients exhibited higher levels of interpersonal mastery following higher-level expressive techniques (versus supportive techniques). However, when the data were summarized in transitional probability matrices, evidence of a specific trend was detected: over time, clients appeared to display greater proportions of high-level MS scores, and smaller proportions of low-level MS scores in response to certain therapist expressive statements (TIL codes of 7). The significance of this trend is examined in question 3b.

3a. For each client, does the percentage of 3L Mastery Scale statements increase over the 4 time points? Likewise, does the percentage of 5Q Mastery Scale statements scores increase across the 4 time points?

Two line graphs were plotted to depict the percentages of 3L scores for each participant at different points in time. Visual inspection of the first line graph (Figure 10a) revealed some evidence that 3L scores increased over 4 time points. With the exception of 2 clients (clients G and I, depicted in dashed lines on the graph), all clients exhibited a visible increase in the percentage of 3L scores over time. In order to potentially see the trend more clearly, the 3L data on each client was condensed into 2 time points: early sessions (an average of the data from the first 2 time points), and late sessions (an average of the data from the last 2 time points). A new line graph was plotted (Figure 10b) which clearly demonstrated an increase in the percentage of 3L scores for 8 out of 10 clients (80%) from the early sessions to the late sessions.

Two line graphs were next plotted to depict the percentages of 5Q scores for each...
participant at different points in time. Visual inspection of the first line graph (Figure 11a) revealed some evidence that 5Q scores increased over 4 time points. With the exception of 3 clients (clients A, D, and E, depicted in dashed lines on the graph), participants exhibited a visible increase in the percentage of 5Q scores over time. In order to potentially see the trend more clearly, the 5Q data on each client was condensed into 2 time points: early sessions (an average of the data from the first 2 time points), and late sessions (an average of the data from the last 2 time points). A new line graph was plotted (Figure 11b) which clearly demonstrated an increase in the proportion of 5Q scores for 9 out of 10 clients (90%) from the early sessions to the late sessions.

In order to evaluate the significance of the difference between the percentages of early and late 3L and 5Q scores, paired-samples t-tests (two-tailed) were conducted. The first t-test considered 3L codes. Ten participants could be included in this analysis. The coefficient of determination ($r^2$) was used to calculate the effect size. The results indicated the percentages of 3L scores in late sessions ($M = 10.42$, $SD = 5.55$) did not significantly differ from those in early sessions ($M = 7.08$, $SD = 3.19$), $t(9) = 1.81$, $p = .10$, $r^2 = .27$. Although the t-test results were not significant, a medium effect size was found.

The second t-test considered the difference between the percentages of early and late 5Q scores. Ten participants could be included in this analysis. The results indicated the percentages of 5Q scores in late sessions ($M = 8.48$, $SD = 4.59$), were significantly higher than those in early sessions ($M = 4.96$, $SD = 1.57$), $t(9) = 2.60$, $p < .05$, $r^2 = .43$. In accordance with the study hypotheses, the t-test results suggested more high-level MS scores in the later stages of therapy.

The results of the analyses conducted as part of question 3a provide evidence that significant increases in MS codes of 5Q (clients’ expressions of insight into repeating
personality patterns of the self) occur over the course of SET. MS codes of 3L (reflecting clients’ positive struggle with difficulties) also increase during SET, albeit not significantly. Based on these trends, there is some evidence that clients exhibited greater interpersonal mastery over the course of SET. With higher power, similar results might also have been found for the 3L codes.

3b. A particular type of expressive intervention on the TIL involves statements which encourage clients to contemplate changes in their thoughts and behaviours. In contrast with supportive interventions, do clients exhibit higher interpersonal mastery following change-focused expressive interventions (TIL codes of 7)?

Prior to comparing supportive interventions to change-focused interventions, a line graph was plotted in order to better understand patterns in the percentage of change-focused interventions (TIL codes of 7) employed by therapists over time. The line graph (Figure 12a) corroborated the previously described trend (see Question 2d) toward greater percentages of certain higher-level expressive statements (i.e., TIL codes of 7) in the later stages of therapy.

In the results of Question 2d, evidence of a second trend was uncovered regarding change-focused interventions: in response to therapists’ statements coded ‘7’, versus supportive statements, clients tended to display greater percentages of high-level MS scores, and smaller percentages of low-level MS scores. Bar graphs were plotted to visually describe this trend. Figure 12b summarizes, for each therapist-client dyad, the percentage of high-level MS statements following TIL codes of 7 versus supportive statements (TIL codes of 1 through 5). Figure 12c summarizes, for each therapist-client dyad, the percentage of low-level MS statements following TIL codes of 7 versus supportive statements.
Figure 12b provided further evidence of the trend toward greater percentages of high-level MS codes following TIL codes of 7. Of the 10 therapist-client dyads, 50% (dyads C, D, F, G, and I) exhibited substantially greater percentages of high-level MS scores following TIL codes of 7, in comparison to supportive statements. In contrast, only 20% of dyads (A and H) exhibited considerably greater percentages of high-level MS codes following supportive statements. The difference in client responses to TIL codes of 7 versus supportive statements was particularly striking for the following therapist-client dyads: C, D, F, and I. Furthermore, Figure 12c provided evidence of the trend toward smaller percentages of low-level MS scores following TIL codes of 7. Of the 10 therapist-client dyads, 40% (dyads A, B, G, and H) exhibited greater percentages of low-level MS scores following TIL codes of 7, in comparison to supportive statements. In contrast, 50% of dyads (dyads C, D, E, F, and I) exhibited considerably greater percentages of low-level MS codes following supportive statements. The difference in client responses to TIL codes of 7 versus supportive statements was particularly striking for the following therapist-client dyads: E, F, and I.

The next step in addressing Question 3c was to conduct a lag sequential analysis (Bakeman & Gottman, 1997). As with the analyses conducted as part of question 2d, each interaction sequence involved an antecedent-consequent pair (Lag0-Lag1), in which each therapist statement was considered the antecedent (Lag0), while each subsequent client statement was considered the consequent (Lag1). The antecedent statement was quantified as the highest-level TIL statement in the therapist’s speech turn. However, therapist scores were collapsed into 2 categories: supportive, and expressive (TIL code 7) statements. The consequent statement was quantified as the highest-level MS statement in the client’s speech turn. As for the analyses from question 2d, client scores were collapsed into 3
categories: high-, mid-, and low-level statements.

A series of two-way contingency table analyses were then conducted for each client (10 analyses in total). Each analysis involved a likelihood ratio chi-square test, where significant results indicate that certain observed cell frequencies are significantly different than expected. Each analysis also included Kendall's tau-b test, which provides an estimate of effect size. For 6 out of 10 analyses, chi-square ($\chi^2$) values were significant ($\chi^2$ values ranged from 6.41 to 28.78, p values ranged from .000 to .04). Standardized residual values were then examined to determine where observed cell frequencies differed significantly from expected frequencies. With respect to the 6 clients with significant chi-square values, significantly elevated standardized residuals (>= |2|) were observed in a total of 6 cells. Standardized residuals in another 12 cells (pertaining to 7 different clients) were elevated, but to a lesser extent (>=|1|). Of the 6 significantly elevated standardized residuals, 4 corroborated the graphically observed trend, while 2 contradicted it (tau-b values ranged from .07 to .42). Of the 12 standardized residuals that were elevated, but not to a significant degree, 9 provided support for the graphically observed trend, while 3 demonstrated the opposite.

In summary, although the results were mixed, there was evidence confirming one of the graphically observed trends; that is, the significant trends indicated that certain expressive statements (TIL codes of 7) were less likely than supportive statements to be followed by low MS scores. It is important to note that the cells reflecting contradictory results only pertained to the second hypothesis, which predicted that expressive statements (TIL codes of 7), versus supportive statements, would be more likely to be followed by high-

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31 Separate contingency table analyses were not conducted for each of the clients’ 4 sessions because low cell counts would have resulted in violations of the assumptions of the statistical procedure. This issue is discussed in more detail in the results section pertaining to question 2d.
level MS codes. Results of the analyses conducted as part of question 3b therefore suggested clients’ responses to certain expressive techniques differed from their responses to supportive techniques. Indeed, clients tended to exhibit fewer low-level MS statements in response to some expressive techniques (TIL codes of 7) versus supportive techniques.
Chapter 6

Discussion

The overarching objective of the current study was to expand our understanding of the therapeutic process in SET through the investigation of two process variables – client interpersonal mastery and therapist expressive techniques – theorized to foster improvement in depressive and anxious symptoms. In reference to the initial research question, it was hypothesized that clients would exhibit more advanced levels of interpersonal mastery over the course of therapy. With regards to the second research question, it was postulated that therapists would employ more advanced expressive interventions in the later stages of the therapeutic process. It was next hypothesized that sequential analyses would reveal higher levels of client interpersonal mastery following high-level expressive techniques, in contrast to supportive techniques.

In relation to the Mastery Scale data, some evidence of enhanced interpersonal mastery over time provided modest support for the research hypotheses. Interestingly, trends in the therapist data were much more robust. In accordance with hypotheses, SET therapists were found to employ significantly greater proportions of high-level statements in the later stages of therapy. With respect to the sequential analyses, findings provided some evidence that clients responded differently to expressive versus supportive techniques. However, robust findings were not obtained in support of the hypothesis that client’s statements would reflect higher levels of mastery following high-level expressive techniques.

The present chapter is divided into 6 sections. The first two sections discuss, in sequence, important results from Research Questions 1 and 2. The latter sections also refer to relevant results from the Exploratory Analyses. The third section highlights key
results from the Preparatory and Descriptive Analyses. In Section 4, the chapter addresses the limitations of the present research, followed by a discussion of directions for future research in Section 5. The concluding section highlights the main research contributions of the current study.

Research Question 1

The first research question examined whether the clients' narratives reflected developments in interpersonal mastery over the course of SET. Graphical inspection of Mastery Scale (MS) scores affirmed the hypothesized decreases in low-level statements in the late versus early stages of therapy, yet no evidence of the expected increases in high-level statements was obtained. When the graphical trend in low-level scores was statistically evaluated, the results did not reveal significant findings; however, a large effect size was found. It is therefore likely that clients do, indeed, exhibit a pattern of fewer low-level scores over the course of SET.

Although increases in high-level statements were not observed in the data, exploratory analyses revealed some interesting trends in specific MS codes, from early to late therapy. Additional analyses demonstrated significant increases in the percentage of 5Q, high-level codes, which captured expressions of insight into repeating personality patterns of the self. Analyses also provided some evidence of increases in the percentage of 3L, mid-level codes, which involve expressions of positive struggle with difficulties. While 3L codes were not considered indicative of the highest levels of mastery, they reflect engagement and effort in the struggle to improve. In the literature pertaining to the transtheoretical stages of change model (Prochaska, 1979; McConnaughy et al., 1983; 1989), codes of 3L would reflect the “action” stage, where individuals are in the process of
working towards change. Cross-discipline research shows that people in the “action” stage are more likely to exhibit long-term adherence to the new, desirable behaviour than individuals in earlier stages (DiClemente et al., 1991; Procahska et al., 1992). The 3L codes on the MS are therefore theoretically meaningful, and the present results suggest these codes might be pertinent in the process of change in SET.

The construct of “interpersonal mastery” (self-control and self-understanding in relationships) is a recent addition to the psychodynamic literature (Grenyer, 2002). The research on this construct has, however, reported significant increases in interpersonal mastery over the course of therapy. In particular, one study found client narratives contained fewer scores at the low end of the mastery scale in the late phases of psychodynamic psychotherapy (Grenyer & Luborsky, 1996). In accordance with these findings, some evidence of similar changes in low-level MS scores was revealed in the present study. Nonetheless, the study by Grenyer and Luborsky (1996) also found increases in high-level MS codes from early to late therapy. In contrast to the latter findings, the current data did not suggest global increases in high-level MS scores over time, although significant increases in one high-level code (5Q) were documented. Moreover, with respect to mean MS scores (high-, mid-, and low-level scores combined), Grenyer and Luborsky’s (1996) findings revealed significant increases from early to late treatment, while similar changes were not identified in the present sample.

It is important to consider possible explanations for the difference between the present results and those of Grenyer and Luborsky (1996). A main difference between the studies pertains to the sample. The clients in the present study were adolescents, and those examined by Grenyer and Luborsky (1996) were adults. It is possible that, due to maturational differences between the two age-groups, adolescents are less amenable to
developing increased insight and self-control, the essence of interpersonal mastery, within a course of brief psychotherapy. Adolescents' skills in emotion regulation, perspective-taking, and abstract thinking are still emerging. Although previous research has suggested older adolescents have the cognitive and emotional capacity to benefit from talk therapy, it could be that developmental differences in some domains account for discrepant results between the present study's results and Grenyer and Luborsky's (1996) findings.

Other explanations might also account for the differences in the results of the two research groups. Based on the use of the MS in the current thesis, it appears that further investigations of the scale's psychometric properties are necessary. In the present study, the scorers found the MS to be highly complex and time-consuming both to learn and use. Despite the detailed training manual, there were difficulties determining with certainty which code best reflected a particular client statement. It is conceivable that subjective differences may exist in the use of the MS from one research group to another, even though strong estimates of the scale's reliability and validity were previously reported (Grenyer, 2002), and adequate observer agreement was achieved in the present study.

Differences between the findings of the present research and that of Grenyer and Luborsky (1996) might be explained by additional factors. It is possible that clients typically exhibit modest changes in interpersonal mastery during therapy, characterized by small effect sizes. Crits-Christoph and Luborsky (1998) managed to document changes in clients' maladaptive interpersonal patterns from early to late SET, using the Core Conflictual Relationship Theme (CCRT) method, a measure of interpersonal functioning and flexibility. The narratives of clients in the latter study revealed fewer negative Responses of Other (ROs) and Responses of Self (RSs), along with increases in the number of positive RSs. Yet, despite these changes, the authors indicated clients' CCRTs remained characteristic of
their relational interactions post-therapy. Given such research results, it is possible that effect sizes are small with respect to gains in interpersonal functioning, particularly when changes are assessed by tracking elements of therapeutic discourse.

It is also possible that Grenyer and Luborsky’s (1996) results do not reflect a widespread, measurable trend in clients who complete a course of psychodynamic psychotherapy. The results obtained by these researchers might be an anomaly. It is necessary to consider that the research on interpersonal mastery and the Mastery Scale is in its early stages. In order to determine whether clients reliably demonstrate an increase in MS scores post-therapy, replication of Grenyer and Luborsky’s (1996) study is critical.

**Research Question 2**

The analyses pertaining to Question 2 examined the link between particular therapist techniques (supportive versus higher-level expressive techniques) and client interpersonal mastery. Prior to examining this link, Question 2 examined the therapist data over time, for the purpose of documenting whether therapists employed more higher-level techniques in the later stages of therapy.

Results regarding trends in the therapist data confirmed the research hypothesis. As expected, the graphical and statistical analyses revealed a robust trend reflecting increased use of high-level Therapist Intentions List (TIL) codes over time. Significant increases in mean TIL scores (high-, mid-, and low-level scores combined) were observed between pre-therapy and late therapy (Session 10 and Session 15). Results also demonstrated significant increases in the proportion of high-level TIL scores from early to late therapy. Moreover, graphical analyses suggested gradual increases in the mean proportion of high-level TIL scores across the first 3 time points.
The observed trends in high-level TIL scores paralleled Luborsky (1984) and Book's (1998) guidelines regarding the therapeutic process in SET. In the pre-therapy stage of SET, therapists are guided to prompt clients to recount Relationship Episodes (REs). Therapists are encouraged to use a number of specific prompts to have clients attend to Responses of Other (RO), Responses of Self (RS), and Wishes (W) in the situations they are recounting. Although these prompts consist of expressive statements (e.g., “How were you feeling while your friend was speaking to you?”), they do not fall into the category of high-level expressive statements, which tend to induce deeper reflection, and often, discomfort (e.g., “You are have difficulty expressing your emotions honestly because, in your family, emotionality is perceived as a weakness”). Therefore, the smallest percentages of high-level statements were expected during the pre-therapy sessions, and results confirmed this hypothesis.

As outlined by Book (1998), by session 5 (the second time point), the SET therapist should be finishing Phase I of therapy, and entering Phase II. More specifically, she is completing the Phase I goal of helping the client recognize the ubiquity of the CCRT in her life. The therapist is also embarking on the Phase II task of helping the client understand the CCRT as a repetition compulsion: a maladaptive pattern linked to past experiences and relationships, which obstructs the fulfillment of the Wish. Beginning around Session 5 and continuing past Session 10 (the third time point), “the major thrust of treatment occurs” (Book, 1998, p.67). In Phase II, the therapist's focus is on interpreting how the patient's ROs are affected by attitudes, feelings, and behaviours linked to prior relationships (e.g., the parent-child relationship). The therapist helps the client explore consequences of the RO and RS, and prompts the client to consider ways in which his/her wish can be actualized. There is consequently strong momentum in the therapy sessions during Phase II. When the
therapeutic relationship is solid, the momentum typically results in more direct and poignant discussions, which involve higher-level expressive therapist techniques such as challenges / confrontations (which help raise the clients' awareness of resistances and defenses) and interpretations (which draw attention to connections previously unknown to the client). As demonstrated by the graphical analyses, therapists did, in fact, employ increasingly greater percentages of high-level expressive statements from pre-therapy, to sessions 5, and session 10.

By session 15 (the fourth and last time point), the therapist is engaged in Phase III of the therapeutic process, and her role is to help the client explore his/her thoughts regarding the upcoming termination of therapy. Luborsky (1984) and Book (1998) direct the therapist to highlight ways in which the client's reactions to termination relate to his/her CCRT. Phase III offers a last opportunity for the client to rework the RO and RS, as well as an opportunity to process insights and changes developed during therapy. In this stage, the therapists therefore might continue to use higher-level expressive techniques, although a decrease in the percentage of such techniques would be likely, given that the bulk of the therapeutic work has been completed, and time is devoted to recapitulating the process of SET. Indeed, the results confirmed this expected trend: graphical analyses revealed a slight decline in the percentage of high-level statements from session 10 to 15.

The discussion now turns to the analyses pertaining to low-level TIL scores (i.e., supportive techniques). It was hypothesized that the percentage of supportive statements would decrease over time. Part of the rationale for this hypothesis was that, given the expected increase in percentage of higher-level expressive interventions, there would be a corresponding decrease in the proportion of other statements, including supportive techniques. The rationale was also partly based on the conjecture that clients would require
the highest percentage of supportive statements in the earlier stages of therapy, while the therapist introduced the therapeutic process and attended to building a solid therapeutic relationship. Results pertaining to low-level TIL scores did not confirm the hypothesis. Interestingly, no significant differences in the proportion of low-level TIL scores were detected. This finding indicates that therapists used similar proportions of supportive statements in the early and late stages of the therapeutic process. The relatively consistent percentage of low-level statements over the course of therapy could reflect a number of different phenomena. The consistency could reflect the importance of the therapist's supportive role in SET. As specified by Luborsky (1984), the therapist's primary task is to listen and understand the client. Luborsky (1984) emphasized the therapist's need for patience and reflection prior to communicating a message (e.g., an interpretation), as well as the benefit of returning to listening and understanding following the delivery of a message. Hence, the consistent percentage of supportive statements over time likely reflect the therapist's focus on listening and understanding during all phases of SET, even as other, phase-specific goals were being accomplished.

The phenomenon of a stable percentage of supportive techniques might also be associated with the particular clients in the current sample. Luborsky (1984) and Book (1998) drew attention to the variable supportive and expressive needs of different clients. While some clients would thrive in a primarily expressive form of SET, others would benefit from ongoing supportive techniques (e.g., clients with traits such as low anxiety tolerance, overly-active superegos, and/or fluctuating levels of self-esteem; Luborsky, 1984). SET therapists were encouraged to determine the extent to which their particular clients required supportive techniques, and to modify the therapeutic process accordingly. Regarding the present study, it is possible that the particular clients in the sample (i.e., adolescents)
required a consistent proportion of supportive techniques due to their developmental stage, while other clients (e.g., adult clients), might benefit more from a smaller percentage of supportive statements (and accordingly, a larger percentage of expressive statements) in the later stages of therapy.

After investigating trends in the TIL data, the second research question focused on analyzing hypothesized links between particular therapist techniques and client interpersonal mastery. By and large, the results did not support the hypothesis that clients would demonstrate higher levels of mastery following higher-level expressive techniques. The results of lag sequential analyses revealed similar levels of interpersonal mastery in immediate response to therapists’ high-level statements and low-level statements. Graphical analyses and visual inspection of transition diagrams corroborated these findings. Moreover, a thorough visual inspection of time-series graphs did not reveal any striking trends regarding therapists’ use of different techniques and client MS scores.

Despite the overall lack of evidence of a relationship between particular therapist techniques and client interpersonal mastery, exploratory analyses did provide some substantiation of the hypothesized trend in relation to one specific therapeutic technique: TIL codes of 7. These codes denote high-level expressive techniques focused on fostering client change (e.g., “Is there anything you could do in the future to prevent angry outbursts between yourself and your mother?”). Sequential analyses indicated that clients exhibited fewer low-level MS statements in response to TIL codes of 7, versus supportive techniques.

Psychodynamic theorists have asserted that interpretations – a type of higher-level expressive technique (TIL code of 9) – are the most potent intervention in psychodynamic therapy. While there is research evidence demonstrating the potency of these techniques (Barber et al., 1998; Marziali, 1984; Milbrath et al., 1999; Piper et al., 1996; Andrusyna et al.,
there is also much research suggesting these techniques are not particularly important (discussed in Beutler et al., 2004; Orlinsky et al., 2004). In accordance with the latter research, the present results indicate high-level therapist techniques do not differ from supportive techniques in the amount to which they are followed by higher-level client statements (i.e., statements reflecting self-understanding and self-control). Nonetheless, exploratory analyses did provide evidence that change-focused therapist statements (TIL codes of 7) were more strongly linked to real-time client improvement.

The relationship between higher-level therapist techniques and client insight appears to be complex. The results of the present thesis revealed considerable variability in clients' responses to higher-level expressive techniques. Client responses sometimes suggested reflection and insight, sometimes reactivity or resistance, and other times their responses were unremarkable. This type of variability in clients' responses has, in fact, been described in the psychodynamic literature (Hoglend et al., 2006; Joyce & Piper, 1996; Piper et al, 1998; 1999; Schut et al., 2005). Expressive techniques like challenges and interpretations inherently involve the expression of ideas that encourage clients to consider unfamiliar perspectives. These techniques therefore have the capacity to either foster insight, or conversely, to incite disagreement, defensiveness, or resistance. Research to date suggests that certain clients might be able to benefit more from this type of technique. For example, some studies have shown that interpretations are more likely to result in better outcomes for clients with higher quality of object relations (Piper et al., 1998; 1999). The literature also suggests that therapist skill in the delivery of interpretations is a critical factor related to client response (Barber et al., 1998; Andrusyna et al., 2006). Without question, research demonstrates that many factors affect clients' responses to interpretations, which are renowned for their potency. The present study suggests that other high-level expressive
interventions, such as those more gently addressing the need for change (TIL codes of 7), might more consistently promote the development of interpersonal mastery.

With respect to the finding that higher-level expressive techniques were not, by and large, linked to higher, in-session MS scores, one last point must be raised regarding the study’s methodology. The present study employed a unique approach to examining psychotherapy process data. It is important to consider that other approaches might be better suited to capturing developments in interpersonal self-control and self-understanding (i.e., interpersonal mastery). The current research measured clients’ immediate reactions to therapist techniques, and important developments in mastery might occur some time afterward. Insights might arise at a later point in time, perhaps even after the therapy session, when clients have the time to fully think through a therapeutic interaction.

**Descriptive and Preparatory Analyses**

The results of the descriptive and preparatory analyses revealed a number of noteworthy findings. First, graphical and statistical analyses provided robust evidence that adolescent participants in the present study exhibited significant improvements regarding symptoms of depression and anxiety. According to two of the graphical analyses, the adolescent participants experienced changes in depressive and anxious symptoms which were comparable to those observed in groups of similar clients (e.g., Mufson et al., 2004; Rice, 2008) who completed evidence-based treatments (e.g., Interpersonal Therapy / Cognitive-Behavioural Therapy). Although the graphical and statistical analyses might suggest that greater changes in depressive versus anxious symptoms occurred following SET, an important point must be taken into consideration. That is, based on the literature, find...

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32 Findings pertaining to these adolescent clients have been discussed in more detail in a larger research project (Wilansky-Traynor, 2010).
greater changes in raw scores are typically observed on the depression questionnaire (BDI) compared with the anxiety questionnaire (MASC). This phenomenon is apparent in Figures 3 and 5, where the changes on the BDI and MASC documented in the present study are clearly comparable to the changes observed in other studies, which assessed improvement in depression and anxiety following evidence-based interventions. Indeed, it is common for raw scores on the MASC to decrease by approximately 10 points following helpful therapeutic interventions for anxiety disorders (e.g., Khanna & Kendall, 2010; Pincus, May, Whitton, Mattis, & Barlow, 2010). Hence, the difference in the magnitude of change does not necessarily reflect large differences in the extent to which participants experienced relief of symptoms of depression versus anxiety. Rather, the different degrees of change are likely an artifact of the questionnaire measures utilized in the study.

The significant improvements in depression and anxiety observed in the present study parallel the results of prior research endorsing the use of SET with adult clients suffering from depression and/or anxiety disorders (Crits-Christoph et al., 2005; Diguer et al., 1993; Luborsky et al., 1996). The current data also corroborate the results of Golombek and Korenblum’s (1995) case study on the successful use of SET with a depressed adolescent girl.

Further analyses completed as part of the descriptive and preparatory analyses also contributed to the psychotherapy process literature. More specifically, two unique process measures were employed in the present research, and valuable data pertaining to these measures were presented. Brin Grenyer and his research have evaluated the psychometric properties of the MS, reporting strong inter-rater reliability (Grenyer, 2002). The current study is the only investigation of the MS outside of Grenyer’s research group. Findings corroborated prior research, which also documented adequate inter-rater reliability.
However, inter-rater agreement estimates (.63 to .77) were not as strong as previously reported (.75 to .89; Grenyer, 2002). Based on the present research, inter-rater reliability estimates for the MS were on the low end of the acceptable range. In fact, MS scorers reported some difficulties with the scale; for example, client statements sometimes fit the criteria for 2 or more MS codes, yet only one code could be selected. Based on the present reliability calculations, as well as on the scorers' experiences of using the scale, it appears that refinement of the MS and its manual is indicated.

The TIL, which was previously used in psychotherapy process research (Hill & O'Grady, 1985; Hill et al., 1988; Kivlighan, 1989), was utilized in a novel way in the current study. In previous research, the TIL was used a self-report measure for therapists to qualify their rationale for employing a particular technique in session. Inter-rater reliability estimates for the TIL were not previously calculated because this psychometric property was not felt to be meaningful for a self-report therapist tool (Hill and O'Grady, 1985). In the present research, the TIL was used by a third party scorer to describe the therapeutic goal of discrete therapist statements in SET. To my knowledge, the TIL has never before been used by third party scorers. The current study is therefore the first to document inter-rater reliability of the TIL, albeit a modified version of the original measure. The modified version of the modified TIL was found to have adequate inter-rater agreement (estimates ranged from .76 to .85, with a mean of .75). Findings indicated a detailed version of the scale, which required the sub-classification of statements based on their interpersonal foci, did not demonstrate sufficient levels of inter-rater agreement. Aside from its psychometric properties, the modified TIL proved to be useful, allowing for the tracking of therapist techniques over the course of SET.
Limitations of the Research

The present study provides a unique contribution to the literature by investigating, in a naturalistic setting, factors that potentially mediate change in psychotherapy. While keeping in mind the strengths of the present research, the results must be interpreted in the context of several notable limitations. Many of these shortcomings attest to the complexities and difficulties of completing psychotherapy process research.

The first limitation involves the sample of adolescent clients. The sample was small (n = 10), and homogenous with respect to gender (100% female) and ethnicity (88.9% Caucasian). The low number of clients especially impacted the investigation of trends in the process measures (MS and TIL) across time-points. Statistical tests conducted to evaluate possible trends were performed under low power, such that significant differences could not be detected for medium and even large effect sizes.

Although a more heterogeneous sample would have better reflected the population of depressed youth, the gender-related homogeneity of the current sample did reflect the preponderance of females among adolescents suffering from depression (Kessler, McGonagle, Swartz, Blazer, & Nelson, 1993; Nolen-Hoeksema & Girgus, 1994), anxiety (Lewinsohn, Gotlib, Lewinsohn, Seeley, & Allen, 1998), and interpersonal stressors (Gore, Aseltine & Colten, 1993; Siddique & D’Arcy, 1984; Wagner & Compas, 1990). Moreover, gender differences in the factors underlying psychological disorders suggest SET might be more effective with females. As discussed in Chapter 2, empirical research has found a stronger link between social stressors and internalizing symptoms in females versus males (Gore, Aseltine & Cohen, 1993; Rudolph & Hammen, 1999; Siddique & D’Arcy, 1984; Wagner & Compas, 1990; Windle, 1992). Due to SET’s strong interpersonal focus, it is reasonable for female clients to be the focus of initial research on SET for adolescents.
A second limitation pertains to the adolescent participants, all of whom were completers of SET. While 16 adolescents expressed interest and qualified for the study, another 6 did not begin or complete the majority of SET, and comprehensive data were unavailable for these non-completers. It is known that results obtained from completer studies might overestimate positive outcome (Holly & Campbell, 1999). Due to loss of contact with most of the 6 clients who did not begin or complete SET, valuable post-therapy data could not be obtained. In some cases, pre-therapy data were also not provided. This design limitation is especially relevant to the preparatory analyses of the self-report data, which revealed significant improvements in symptoms of depression and anxiety following SET. Despite the absence of longitudinal data on non-completers, analyses of pre-therapy self-report data were conducted, and these revealed no significant differences between completers and non-completers.

As with the adolescent participants, the therapists were homogenous with respect to gender (100% female). This homogeneity did, however, reflect the gender composition within clinical psychology and social work, which are female-dominated professions (Curtis, Lopez, Batsche, & Smith, 2006; Olos & Hoff, 2006; Bradley, 2000). Given the subtleties of psychotherapy processes, some results might be different if the client and therapist were of opposite gender or both were male. It is also noteworthy that the majority of therapists were student clinicians, conducting SET for the first time. Weekly supervision with an experienced SET therapist was, however, mandatory, and analyses of the TIL data suggested all therapists implemented SET as directed in the manuals (Luborsky, 1984; Book, 1998). Graphical and statistical analyses indicated the therapists focused on collecting information about the clients’ relationship patterns pre-therapy, and heightened their use of challenges and interpretations in the second phase of SET. Moreover, VPPS
scores suggested strong therapeutic relationships between the therapists and their clients, as well as similar VPPS scores for therapists with varying levels of clinical experience.

A further limitation was associated with the overlapping roles of present author in various aspects of the study. Although it would have been ideal for separate tasks to be conducted by different researchers, to minimize possible sources of bias, the involvement of the current author was required at each stage of the project, from the provision of therapy to the scoring of transcripts. Any sources of biases in the study are believed to be negligible given that the author was blind to the hypotheses at the time that therapy was provided. Regarding the scoring of the transcripts, the process measures required adherence to detailed criteria. Moreover, inter-rater reliability was calculated to ensure consistent use of the measures across researchers.

Lastly, an important limitation pertained to the very low frequency of higher-level therapist expressive statements in many SET sessions. This problem resulted in the inability to study the sequential data in the most appropriate manner, which would involve conducting separate contingency table analyses for each client, and each session. It is possible that the student therapists in this study lacked the confidence to make these potentially controversial statements to their clients very often. Alternatively, therapists may have adapted their statements to the developmental needs of their adolescent clients, anticipating resistance to large numbers of higher-level expressive statements.

**Directions for Future Research**

*Establishing the Efficacy of SET.* Given the ubiquity of internalizing disorders among adolescents, it is important that clinical researchers continue to evaluate promising therapies. The literature indicates that SET is a valuable intervention for adults with
internalizing problems, and results of the current study suggest SET is also beneficial to adolescents. Additional research, including randomized controlled trials, is necessary to establish the efficacy of SET with adolescents suffering from depression and/or anxiety.

Re-evaluating the Process Measures (MS and TIL). In addition to the need for further research on SET, more research is also required on the process measures utilized in the current study. With respect to the TIL, a modified version of this measure was examined in the present thesis, and found to be a reliable and useful tool in process research. However, it would be important for additional studies to replicate the current findings regarding its psychometric properties.

Regarding the MS, further analyses of the scale would be essential to promote its continued use as a process measure. Although good psychometric properties have previously been documented (Grenyer, 2002), and adequate observer agreement was achieved in the present thesis, the MS was complex and time-consuming to use. In the current study, scorers reported difficulties determining with certainty which MS code best reflected a particular client statement. Modifications to the scale would likely enhance its psychometric properties and ease of use. Further studies should therefore consider refining the MS and re-examining its reliability and validity.

Additional research on the MS would be necessary to determine whether or not increases in MS scores occur over the course of brief psychodynamic psychotherapy. The pattern of increased scores reported by Grenyer and Luborsky (1996), was not replicated in the present thesis, the only other study to examine MS scores over time. It would also be worthwhile for future studies to re-examine trends in MS codes of 5Q (expressions of insight into repeating personality patterns of the self), and 3L (expressions of positive struggle with difficulties). These codes occurred in greater proportions from early to late in the present
study. More specifically, it would be interesting to examine changes in 3L scores in relation to the stages of change model. It is possible that clients with greater proportions of 3L scores embody the “action” stage of this model. Greater proportions of 3L codes might therefore be associated with a heightened chance of maintaining therapeutic gains.

For researchers interested in employing the MS at the present time, the use of multiple client process measures is recommended, such that results obtained on the MS can be compared to a related measure of client functioning. Moreover, it is possible that another scale might better capture the different levels of interpersonal mastery conveyed by clients’ narratives.

The Process of Change in SET. The current study leaves an important puzzle to be resolved. On one hand, the results provide evidence that participants exhibited improvements in their internalizing symptoms following SET. The data also suggest a positive therapeutic alliance for each therapist-client dyad, as well as therapist adherence to the SET approach described by Luborsky (1984) and Book (1998). On the other hand, despite the latter results, current findings were unclear regarding the mechanisms of change leading to client improvement. The present sub-section outlines directions to be considered by future researchers seeking to delineate the role of therapist techniques in promoting client gains in SET.

It is clear that further research on higher-level expressive techniques is warranted. Thus far, the literature is split on whether higher-level expressive techniques play an important role in promoting client improvement in brief psychodynamic psychotherapy. The current research revealed an interesting link between a certain type of higher-level

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33 While the proportions of 5Q and 3L scores increased from early to late therapy, only the increase in 5Q scores was statistically significant. It should be noted that the statistical tests were conducted under low power. With higher power, the increase in proportions of 3L scores might also have been significant.
expressive statement – change-focused statements – and improvements in client interpersonal mastery. In-session, changed-focused interventions have been discussed as important aspects of various therapeutic models, including solution-focused (Guterman, 2006), and cognitive-behavioural therapies (Wright, 2006). While interpretations, rather than change-focused statements, are most often discussed as potent therapeutic interventions in psychodynamic theory, it is possible that the latter statements are important agents of change in psychotherapeutic models like SET, and future research should continue to explore this possibility.

Although specific categories of therapist statements, such as change-focused statements, might be associated with higher-level client responses, the relationship between therapist techniques and improved client mental health is undoubtedly very complex. As discussed above, the literature documents variability in clients’ responses to higher-level expressive statements, and several factors appear to mediate the extent to which clients’ derive benefits from these statements. Some authors have suggested client progress in response to higher-level therapist techniques might depend on their quality of client object relations (Piper et al., 1998; 1999), as well as on the degree of competence with which the techniques are delivered by the therapist (Barber et al., 1996). A clear link between higher-level expressive techniques and client improvement might only be apparent when the right variables are factored into the equation, suggesting that studies of moderators of treatment response would be fruitful.

Further levels of complexity in the psychotherapy process might also obscure the role of therapist techniques in client improvement. For example, there is evidence to suggest therapists do not deliver techniques as discrete statements. Rather, it may be more common for therapists to structure their interventions over a period of several minutes,
building up to the use of a technique at a later point in time (discussed in Hill & O'Grady, 1985). It might therefore be more useful to operationalize therapist techniques as clusters of statements, as opposed to utterances within a single speech turn. The use of varied methodologies in future research would increase the likelihood of elucidating the key factors involved in client improvement.

Indeed, in recognition of the complexity of the psychotherapy process, future research should pay careful attention to the type of methodology selected to study the role of therapist techniques on client improvement. More specifically, consideration should be given to the time between the measurement of therapist techniques and the assessment of client responses. Through graphical and statistical analyses, the present study considered clients’ immediate responses to each therapist statement. Additionally, trends in interpersonal mastery were considered across sessions and in relation to the types of therapist techniques employed within a session. While strong links were not, by and large, detected between higher-level expressive interventions and interpersonal mastery, it would be important for future studies to consider temporal trends in other client outcome variables because client gains might not immediately follow therapist techniques.

With respect to methodology, it would also be valuable for future SET research to focus on therapist techniques identified by the client as being important in fostering change. A branch of the psychotherapy process literature – ‘significant events research’ – has focused on examining critical moments in therapy, as identified by clients reviewing transcripts of their therapy sessions. Interestingly, this branch of research has discovered that therapists and clients often have divergent perspectives on what is significant in a therapy session (Timulak, 2010). Studies examining the process of change in SET using a ‘significant events’ methodology would be highly beneficial, adding to our understanding of
clients’ varied reactions to particular therapist techniques. Through this type of research design, clients would have the chance to identify helpful versus unhelpful therapist techniques. Moreover, they could be offered the opportunity to elaborate on the reasons for which certain techniques were salient.

Despite evidence that participants made significant gains following SET, the present study was unable to clearly uncover the SET-specific mechanisms leading to client change. In order to further elucidate the role of therapist techniques on client improvement, future researchers should consider a number of factors. It appears that, while a focus on therapist interpretations is theoretically meaningful, the role of other higher-level expressive techniques (e.g., change-focused statements) would also be important to address. Moreover, future research methodologies should reflect the complex nature of the psychotherapeutic process, by taking into account variables that might obscure the relationship between therapist techniques and client gains. It is critical that researchers continue to investigate whether theorized processes of change correspond to observable phenomena during the therapeutic process. It is only by furthering our understanding of the key factors in psychotherapy that we can approach the goal of providing highly effective, well-tailored treatments to individuals suffering from mental illness.

In summary, key areas for further research include establishing the efficacy of SET as a beneficial therapy for depressed / anxious adolescents, re-evaluating the process measures (MS and TIL) employed in the present research, and further investigating, through diverse methodologies, the mechanisms of change leading to client improvement in SET.

Final Thoughts

The present study attempted to capture the nuances of how client and therapist
variables transformed throughout therapy. By and large, findings did not demonstrate significantly higher levels of interpersonal mastery from early to late SET. However, modest trends toward fewer low-level MS scores over time were observed, as well as significant increases in a meaningful, high-level code. The latter findings suggest that, over the course of SET, adolescent clients might show signs of improvement in specific aspects of interpersonal mastery. Results suggest that adolescents’ gains might be evidenced by fewer instances of poor self-control.

In contrast to the client data, patterns in the therapist data were easily discernible. From early to late therapy, SET therapists employed significantly greater percentages of high-level expressive techniques, while utilizing similar proportions of supportive statements over time. The observed trends in the therapist data were consistent with the guidelines provided in the SET manuals, thereby reflecting positively on the manualization of SET by Luborsky (1984) and Book (1998).

In relation to the sequential analyses, the overall results did not reveal significant differences in client responses to higher-level expressive statements versus supportive statements. As a whole, the therapist data demonstrated clients’ immediate responses to higher-level expressive techniques were highly variable. Despite the variability in the sequential data, exploratory findings suggested smaller proportions of low-level MS codes in response to certain expressive statements (TIL codes of 7), which directly focused on promoting change. Future studies should continue to examine the role of various expressive statements in brief psychodynamic psychotherapy, rather than solely focusing on therapist interpretations, the expressive technique most often discussed in the literature.

Lastly, the present thesis provided preliminary results in support of SET as a promising treatment for adolescents with internalizing disorders. It is critical that further
research assess the efficacy and effectiveness of SET, in addition to uncovering the key factors linked to client gains. Ultimately, such research will benefit the larger goals of providing more helpful and efficient mental health services to adolescents suffering from internalizing disorders.
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Table 1.

*The Supportive and Expressive Techniques Described by Luborsky (1984) and Book (1998)*

**Supportive Techniques**

<table>
<thead>
<tr>
<th>Empathic comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining the therapeutic frame</td>
</tr>
<tr>
<td>Maintaining vital defenses and maintaining appropriate self-object transferences</td>
</tr>
<tr>
<td>(e.g., Therapists strive to bolster the client’s self-esteem by recognizing and praising client’s accomplishments, both therapy-related and otherwise. They also seek to uphold the client’s sense of self-cohesion by acknowledging and validating the client’s internal affect states.)</td>
</tr>
<tr>
<td>Demonstrating genuine interest and respect</td>
</tr>
<tr>
<td>Setting limits appropriately</td>
</tr>
<tr>
<td>(e.g., Therapists support clients by setting appropriate limits when it comes to self-destructive behaviours. Based on the SET model, they actively attend to such behaviours by discussing the issue, discouraging harmful courses of action, and providing guidance when needed.)</td>
</tr>
<tr>
<td>Returning to the “here-and-now” perspective</td>
</tr>
<tr>
<td>(e.g., Focusing on the present can provide a sense of security, and a greater sense of hope in tackling difficulties.)</td>
</tr>
<tr>
<td>Noting therapeutic gains</td>
</tr>
</tbody>
</table>

**Expressive Techniques**

<table>
<thead>
<tr>
<th>Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>(These techniques help elucidate the client’s wishes, feelings, and responses.)</td>
</tr>
<tr>
<td>Confrontation</td>
</tr>
<tr>
<td>(These techniques help bring awareness to aspects of resistances, defences, or inaccuracies in the client’s logic.)</td>
</tr>
<tr>
<td>Interpretation</td>
</tr>
<tr>
<td>(These techniques involve offering insights to clients, and shedding light on the reasons underlying a problem. Interpretations help point out connections between different aspects of an issue.)</td>
</tr>
</tbody>
</table>
### The Levels and Scores of the Mastery Scale

<table>
<thead>
<tr>
<th>Level and Score</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1. Lack of impulse control</strong></td>
<td></td>
</tr>
<tr>
<td>1A</td>
<td>Expressions of being emotionally overwhelmed</td>
</tr>
<tr>
<td>1B</td>
<td>References to immediacy of impulses</td>
</tr>
<tr>
<td>1C</td>
<td>References to blocking defences</td>
</tr>
<tr>
<td>1D</td>
<td>References to ego-boundary disorders</td>
</tr>
<tr>
<td><strong>Level 2. Introjection and projection of negative affects</strong></td>
<td></td>
</tr>
<tr>
<td>2E</td>
<td>Expressions of suffering from internal negative states</td>
</tr>
<tr>
<td>2F</td>
<td>Expressions indicative of negative projection on to others</td>
</tr>
<tr>
<td>2G</td>
<td>Expressions indicative of negative projection from others</td>
</tr>
<tr>
<td>2H</td>
<td>References to interpersonal withdrawal</td>
</tr>
<tr>
<td>2I</td>
<td>Expressions of helplessness</td>
</tr>
<tr>
<td><strong>Level 3. Difficulties in understanding and control</strong></td>
<td></td>
</tr>
<tr>
<td>3J</td>
<td>Expressions of cognitive confusion</td>
</tr>
<tr>
<td>3K</td>
<td>Expressions of cognitive ambivalence</td>
</tr>
<tr>
<td>3L</td>
<td>References to positive struggle with difficulties</td>
</tr>
<tr>
<td><strong>Level 4. Interpersonal awareness</strong></td>
<td></td>
</tr>
<tr>
<td>4M</td>
<td>Expressions of being emotionally overwhelmed</td>
</tr>
<tr>
<td>4N</td>
<td>References to immediacy of impulses</td>
</tr>
<tr>
<td>4O</td>
<td>References to blocking defences</td>
</tr>
<tr>
<td>4P</td>
<td>References to ego-boundary disorders</td>
</tr>
<tr>
<td><strong>Level 5. Self-understanding</strong></td>
<td></td>
</tr>
<tr>
<td>5Q</td>
<td>Expressions of insight into repeating personality patterns of self</td>
</tr>
<tr>
<td>5R</td>
<td>Making dynamic links between past and present relationships</td>
</tr>
<tr>
<td>5S</td>
<td>References to interpersonal union</td>
</tr>
<tr>
<td>5T</td>
<td>Expressions of insight into interpersonal relations</td>
</tr>
<tr>
<td><strong>Level 6. Self-control</strong></td>
<td></td>
</tr>
<tr>
<td>6U</td>
<td>Expressions of emotional self-control over conflicts</td>
</tr>
<tr>
<td>6V</td>
<td>Expressions of new changes in emotional responding</td>
</tr>
<tr>
<td>6W</td>
<td>References to self-analysis</td>
</tr>
</tbody>
</table>

Reproduced from Grenyer (1996, p.412)
Table 3.

The Categories of the Modified Therapist Intentions List

**Supportive Techniques**
The purpose of supportive techniques is to allow the patient to feel safe within the psychotherapeutic relationship. These techniques are used to reduce immediate distress and to strengthen adaptive ways of coping that the individual already possesses.

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>ASSESS – Get information / Clarify</td>
<td>“Where were you living at the time?” (1a)</td>
</tr>
<tr>
<td>1b</td>
<td>ASSESS – Focus</td>
<td>“Tell me about the last time she got nasty.” (1b)</td>
</tr>
<tr>
<td>2</td>
<td>SET LIMITS</td>
<td>“We will be spending quite a bit of time looking at how your relationship pattern affects your life.” (2)</td>
</tr>
<tr>
<td>3</td>
<td>EDUCATE / GIVE INFORMATION</td>
<td>“It is important for you to stay in school.” (3)</td>
</tr>
<tr>
<td>4a</td>
<td>SUPPORT – Convey acceptance and understanding</td>
<td>“I can see you are trying your best.” (4a)</td>
</tr>
<tr>
<td>4b</td>
<td>SUPPORT – Instill hope</td>
<td>“I am here to help you with it.” (4b)</td>
</tr>
<tr>
<td>5a</td>
<td>PROVIDE POSITIVE FEEDBACK – In context of RE / CCRT</td>
<td>“You’re telling me that, this time, you didn’t drink to feel better after the conflict – I think that’s really something.” (5a)</td>
</tr>
<tr>
<td>5b</td>
<td>PROVIDE POSITIVE FEEDBACK – Not in context of RE / CCRT</td>
<td>“You have made so many improvements.” (5b)</td>
</tr>
</tbody>
</table>

**Expressive Techniques**
These techniques encourage previously repressed painful material to emerge and be observed, understood, and resolved. Expressive techniques help clients identify and work through problematic patterns. They are exploratory, and encourage the development of insight.

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6a</td>
<td>EXPLORE – In context of RE / CCRT (RO, RS, W)</td>
<td>“How were you feeling?” (6a-RS)</td>
</tr>
<tr>
<td>6b</td>
<td>EXPLORE – Not in context of RE / CCRT</td>
<td>“How did you react / What did you do when it started to rain?” (6b)</td>
</tr>
<tr>
<td>6c</td>
<td>EXPLORE – In context of the therapeutic relationship (RO, RS, W)</td>
<td>“How would you have wanted me to respond?” (6c-W)</td>
</tr>
</tbody>
</table>
| 7a | CHANGE –  
In context of RE / CCRT (RO, RS, W) | “Is there anything you could do to have the interaction turn out more positively?” (7a-RS) |
| 7b | CHANGE –  
Not in context of RE / CCRT | “This week, see if you can remember to set your alarm before you brush your teeth.” (7b) |
| 7c | CHANGE –  
In context of the therapeutic relationship (RO, RS, W) | “You can try to tell me ‘When you were making that suggestion, I felt hurt’” (7c-RS) |
| 8a | CHALLENGE –  
In context of RE / CCRT (RO, RS, W) | “I noticed that in that conflict with your mother, you seemed to have a hard time understanding her perspective.” (8a-RS) |
| 8b | CHALLENGE –  
Not in context of RE / CCRT | “Last week you said you really want to do well on your exam, but now you say you don’t care.” (8b) |
| 8c | CHALLENGE –  
Dealing with resistance in the therapeutic relationship (RO, RS, W) | “Today is the third time you’ve come to session late. What’s happening?” (8c-RS) |
| 9a | INTERPRETATION –  
In context of RE / CCRT (RO, RS, W) | “As you said, you really tend to spend time alone whenever there are breaks. I wonder if your classmates don’t talk to you because they haven’t had the chance to get to know you.” (9a-RO) |
| 9b | INTERPRETATION –  
Not in context of RE / CCRT | “You are unable to relax because it reminds you of your life when you were failing school.” (9b) |
| 9c | INTERPRETATION –  
Dealing with the therapeutic relationship (RO, RS, W) | “I wonder if you missed the last session because we spoke about some very painful issues last time we met. Maybe it felt stressful or uncomfortable for you to come back after that.” (9c-RS) |

Adapted version of the Helper Intentions List and Helping Skills System (Hill et al., 1988).
Table 4.

*Diagnoses of the Participants (n = 10)*

<table>
<thead>
<tr>
<th></th>
<th>( n )</th>
<th>Comorbid mood disorder</th>
<th>Comorbid anxiety disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mood Disorder</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>8</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Major Depressive Disorder (past)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dysthymic Disorder</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Anxiety Diagnoses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Specific Phobia</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 5

**Ranges, Means, and Standard Deviations of the Codable Statements in Transcripts**

<table>
<thead>
<tr>
<th></th>
<th>Number of Transcripts</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M (SD)</th>
</tr>
</thead>
</table>
| **Codable Client Statements**  
  *(using the Mastery Scale)* |                       |         |         |              |
| Pre-Therapy Session    | 9                     | 295     | 486     | 403.22 (60.82) |
| Session 5              | 10                    | 143     | 500     | 302.50 (114.42) |
| Session 10             | 10                    | 180     | 421     | 311.10 (68.25)  |
| Session 15             | 9                     | 119     | 483     | 294.78 (110.30) |
| Overall (all sessions) | 38                    | 119     | 500     | 326.79 (98.20)  |
| **Codable Therapist Statements**  
  *(using the Therapist Intentions List)* |                       |         |         |              |
| Pre-Therapy Session    | 9                     | 101     | 496     | 252.11 (141.31) |
| Session 5              | 10                    | 92      | 308     | 199.50 (70.12)  |
| Session 10             | 10                    | 95      | 358     | 178.50 (87.54)  |
| Session 15             | 9                     | 85      | 293     | 185.44 (75.79)  |
| Overall (all sessions) | 38                    | 85      | 496     | 203.11 (97.19)  |
### Table 6
*Ranges, Means, and Standard Deviations of the Uncodable Statements in Transcripts*

<table>
<thead>
<tr>
<th></th>
<th>Number of Transcripts</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uncodable Client Statements</strong> <em>(using the Mastery Scale)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Therapy Session</td>
<td>9</td>
<td>11</td>
<td>103</td>
<td>41.00 (33.32)</td>
</tr>
<tr>
<td>Session 5</td>
<td>10</td>
<td>2</td>
<td>83</td>
<td>31.30 (28.71)</td>
</tr>
<tr>
<td>Session 10</td>
<td>10</td>
<td>3</td>
<td>27</td>
<td>15.80 (7.05)</td>
</tr>
<tr>
<td>Session 15</td>
<td>9</td>
<td>6</td>
<td>83</td>
<td>24.67 (23.60)</td>
</tr>
<tr>
<td>Overall (all sessions)</td>
<td>38</td>
<td>2</td>
<td>103</td>
<td>27.95 (25.14)</td>
</tr>
<tr>
<td><strong>Uncodable Therapist Statements</strong> <em>(using the Therapist Intentions List)</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Therapy Session</td>
<td>9</td>
<td>3</td>
<td>48</td>
<td>21.33 (14.94)</td>
</tr>
<tr>
<td>Session 5</td>
<td>10</td>
<td>5</td>
<td>27</td>
<td>12.00 (6.34)</td>
</tr>
<tr>
<td>Session 10</td>
<td>10</td>
<td>1</td>
<td>18</td>
<td>7.30 (4.95)</td>
</tr>
<tr>
<td>Session 15</td>
<td>9</td>
<td>1</td>
<td>39</td>
<td>12.44 (12.66)</td>
</tr>
<tr>
<td>Overall (all sessions)</td>
<td>38</td>
<td>1</td>
<td>48</td>
<td>13.08 (11.17)</td>
</tr>
</tbody>
</table>
Table 7

Ranges, Means, and Standard Deviations of Subscales of the Vanderbilt Psychotherapy Process Scale (VPPS) (n = 10)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Session 5 M (SD)</th>
<th>Session 15 M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Client Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client participation</td>
<td>8</td>
<td>40</td>
<td>34.90 (7.46)</td>
<td>37.20 (7.81)</td>
</tr>
<tr>
<td>Client hostility</td>
<td>6</td>
<td>30</td>
<td>7.50 (2.76)</td>
<td>7.70 (3.09)</td>
</tr>
<tr>
<td>Client psychic distress</td>
<td>9</td>
<td>45</td>
<td>16.80 (6.53)</td>
<td>17.90 (7.78)</td>
</tr>
<tr>
<td>Client exploration</td>
<td>7</td>
<td>35</td>
<td>25.80 (3.58)</td>
<td>25.60 (4.65)</td>
</tr>
<tr>
<td><strong>Client Involvement</strong></td>
<td>-22</td>
<td>34</td>
<td>27.40 (10.06)</td>
<td>29.50 (10.76)</td>
</tr>
<tr>
<td><strong>Client Total</strong></td>
<td>-60</td>
<td>60</td>
<td>36.40 (18.71)</td>
<td>37.20 (19.79)</td>
</tr>
<tr>
<td><strong>Therapist Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Therapist exploration</td>
<td>13</td>
<td>65</td>
<td>54.20 (5.25)</td>
<td>51.30 (6.65)</td>
</tr>
<tr>
<td>Therapist warmth &amp; friendliness</td>
<td>8</td>
<td>40</td>
<td>37.80 (1.23)</td>
<td>38.30 (1.57)</td>
</tr>
<tr>
<td>Negative therapist attitude</td>
<td>6</td>
<td>48</td>
<td>6.60 (0.97)</td>
<td>6.00 (0.00)</td>
</tr>
<tr>
<td><strong>Therapist Total</strong></td>
<td>-27</td>
<td>99</td>
<td>85.40 (5.87)</td>
<td>87.40 (6.38)</td>
</tr>
</tbody>
</table>

N.B. Shaded regions represent subscales where low scores are positive
Note. Red letters on the x-axis denote dyads in which the therapist had several years of therapy experience. The other therapists were student clinicians.

*Figure 1.* Total Scores on the Vanderbilt Psychotherapy Process Scale (VPPS) for each Client-Therapist Dyad, at Sessions 5 and 15
N. B. Scores in the shaded area reflect “minimal” depression, or normal functioning.

Figure 2. Client Scores on the Beck Depression Inventory (BDI), Pre- and Post-Therapy
N. B. Scores in the shaded area reflect “minimal” depression, or normal functioning.

Figure 3. Pre- and Post-Therapy Scores on the Beck Depression Inventory (BDI) for Clients Undergoing Supportive-Expressive Therapy (n=8) in the Present Study Versus Clients Undergoing Interpersonal Psychotherapy (n=34) in the Study by Mufson et al. (2004)
N. B. Scores in the shaded area reflect “minimal” anxiety, or normal functioning.

Figure 4. Client Scores on the Multidimensional Anxiety Scale for Children (MASC), Pre- and Post-Therapy
N. B. Scores in the shaded area reflect “minimal” depression, or normal functioning.

Figure 5. Pre- and Post-Therapy Scores on the Multidimensional Anxiety Scale for Children (MASC) for Clients Undergoing Supportive-Expressive Therapy (n = 6) in the Present Study Versus Clients Undergoing CBT (n = 7), Relaxation Training (n = 7), or Study Skills Training (n = 6) in the Study by Rice (2008)
Figure 6a. Percentage of High-Level Mastery Scale (MS) Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15
Figure 6b. Percentage of Low-level Mastery Scale (MS) Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 1
Figure 7a. Percentage of High-Level Therapist Intentions List (TIL) Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15
Figure 7b. Percentage of Low-Level Therapist Intentions List (TIL) Scores for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15
Figure 8a. Scatterplot of Mean Mastery Scale (MS) Scores Versus Mean Scores on the Therapist Intentions List (TIL)
Figure 8b. Scatterplot of the Percentage of High-Level Mastery Scale Scores Versus the Percentage of High-Level Scores on the Therapist Intentions List
Figure 9a. Client A – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d)

*The numbers in brackets reflect the proportion of each TIL score in relation to the total number of TIL statements scored in a session

*The symbol “0” refers to therapist / client statements that were not scorable
**Figure 9b.** Client B – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d).
**Figure 9c.** Client C – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d)

*the numbers in brackets reflect the proportion of each TIL score in relation to the total number of TIL statements scored in a session

*the symbol "∅" refers to therapist / client statements that were not scorable
a) **Figure 9d.** Client D – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d)

*the numbers in brackets reflect the proportion of each TIL score in relation to the total number of TIL statements scored in a session

*the symbol "0" refers to therapist / client statements that were not scorable
Figure 9e. Client E – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d).
**Figure 9f.** Client F – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d)
Figure 9g. Client G – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d)
Client H – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), and Session 10 (c).

**Figure 9h.**
Figure 9i. Client I – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Pre-Therapy (a), Session 5 (b), Session 10 (c), and Session 15 (d).
a) Client J – Transitional probability matrices indicating probability of MS score (1, 2, 3) given a particular TIL score, for each session: Session 5 (a), Session 10 (b), and Session 15 (c).

*the numbers in brackets reflect the proportion of each TIL score in relation to the total number of TIL statements scored in a session

*the symbol "∅" refers to therapist / client statements that were not scorable
Figure 10a. Percentage of 3L Mastery Scale (MS) Codes for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15
Figure 10b. Percentage of 3L Mastery Scale (MS) Scores for Each Client in Early Versus Late Therapy Sessions
Figure 11a. Percentage of 5Q Mastery Scale (MS) Codes for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15
Figure 11b. Percentage of 5Q Mastery Scale (MS) Scores for Each Client in Early Versus Late Therapy Sessions
Figure 12a. Percentage of Therapist Intentions List (TIL) Codes of 7 for Each Client at Each Time Point: Pre-Therapy, Session 5, Session 10, and Session 15
Figure 12b. Percentage of High-Level Mastery Scale (MS) Scores following Therapist Intentions List (TIL) Supportive Codes and Codes of 7, for each Client-Therapist Dyad
Figure 12c. Percentage of Low-Level Mastery Scale (MS) Scores following Therapist Intentions List (TIL) Supportive Codes and Codes of 7, for each Client-Therapist Dyad
Appendix A

Appendix pertaining to Chapter 4 (Methods)

**Instructions for the Clausing of Transcripts**

**Divide the statements into independent clauses**

**Definition of an independent clause:**
An independent clause expresses a completed thought

AND

Can stand alone as a sentence

**Phrases, dependent clauses, and incomplete thoughts**
Phrases, dependent clauses, and incomplete thoughts cannot be considered independent units. They must be included as part of a larger independent clause.

Phrases that cannot stand alone as an independent unit include:

- What he wanted
- When I heard the news
- Exercising at night

**Some Examples of Independent Clauses:**

**Type 1: Independent clauses with subordinate clauses**

/The report that he submitted was well-documented./
/He got what he wanted./
/Exercising at night helped her sleep better./
/I was astonished when I heard the news./
/Some, you know, very serious things may be, you know, happening./
/You feel uncertain because your mom is./

**Type 2: Words or phrases that represent an independent clause**

/What?/ [i.e., *What did you say?*]
/Good!/ [i.e., *That is good!*
/What about your other friends?/
/I am going… I am going to see… to see the doctor tomorrow./
/Yeah?/ [as in “Really?”] Tell me more about it.
**Type 3: Clauses that are missing an obvious word**

[What room did they give you?] /The same as before./

/And he would ask her to write the… /[person stops talking] /

/And she wanted to do the… the… she wanted to do it when she got back to Toronto./

**These words tend to introduce independent clauses:**

If a statement begins with one of the words below and can stand alone as a complete sentence, it is coded as an independent unit.

<table>
<thead>
<tr>
<th>And</th>
<th>Or</th>
<th>Nor</th>
<th>But</th>
<th>Also</th>
<th>Besides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Then</td>
<td>Thus</td>
<td>Still</td>
<td>Yet</td>
<td>So</td>
<td>Hence</td>
</tr>
<tr>
<td>Therefore</td>
<td>However</td>
<td>Consequently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moreover</td>
<td>Nevertheless</td>
<td>Otherwise</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e.g., /I usually enjoy her company, but/ I don’t want her to stay overnight./
e.g., /I enjoy her company, but only on the weekends./
e.g., /Maybe I could visit her in Ottawa or/ maybe she could come another time./
e.g., /I tend to run away or hide./

**These words tend to introduce dependent clauses:**

If a statement begins with one of these words and does not stand alone as a complete sentence, it is not coded as an independent unit.

<table>
<thead>
<tr>
<th>Who</th>
<th>That</th>
<th>Which</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>If</td>
<td>As</td>
<td>As if</td>
<td>Then</td>
</tr>
<tr>
<td>As</td>
<td>As if</td>
<td>As long as</td>
<td>As though</td>
</tr>
<tr>
<td>Though</td>
<td>Although</td>
<td>Because</td>
<td></td>
</tr>
<tr>
<td>So that</td>
<td>Unless</td>
<td>Where</td>
<td></td>
</tr>
<tr>
<td>Whenever</td>
<td>Wherever</td>
<td>While</td>
<td></td>
</tr>
<tr>
<td>Whereas</td>
<td>Where</td>
<td>Before</td>
<td></td>
</tr>
</tbody>
</table>

e.g., /Maybe she did not give you a good mark because she is missing some of your assignments./
Appendix B

*Graphs pertaining to Chapter 5 (Results), Research Questions 1a and 2a*

Client A – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client B – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client C – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client D – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client E – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client F – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client G – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client H – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, and Session 10
Client I – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client J – Mean Therapist Intention Scores and Client Mastery Scores for Each Session: Session 5, Session 10, and Session 15
Appendix C

Graphs pertaining to Chapter 5 (Results), Research Question 1b

Client A – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client B – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15

Total Statements Coded:
- RE: 372
- Session 5: 313
- Session 10: 318
- Session 15: 265

Total Statements Uncoded:
- RE: 20
- Session 5: 25
- Session 10: 14
- Session 15: 18
Client C – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client D – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client E – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client F – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client G – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client H – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, and Session 10
Client I – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client J – Proportions of High-, Mid-, and Low-Level Mastery Scale Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15

### Total Statements Coded:
- RE: 0
- Session 5: 450
- Session 10: 370
- Session 15: 311

### Total Statements Uncoded:
- RE: 0
- Session 5: 2
- Session 10: 13
- Session 15: 7
Appendix D

Graphs pertaining to Chapter 5 (Results), Research Question 2b

Client A – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client B – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client C – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client D – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client E – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client F – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
## Client G – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15

<table>
<thead>
<tr>
<th></th>
<th>RE</th>
<th>Session 5</th>
<th>Session 10</th>
<th>Session 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coded</td>
<td>214</td>
<td>302</td>
<td>231</td>
<td>293</td>
</tr>
<tr>
<td>Uncoded</td>
<td>3</td>
<td>15</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

Proportion of Therapist Intention Codes

- **High-level**
- **Mid-level**
- **Low-level**
Client H – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client I – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15
Client J – Proportions of High-, Mid-, and Low-Level Therapist Intentions Codes in Each Session: Pre-Therapy, Session 5, Session 10, and Session 15