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Predicting therapeutic gains in depression from interpersonal mastery

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University of Wollongong

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Predicting Therapeutic Gains in Depression from Interpersonal Mastery

A thesis submitted in partial fulfilment of the requirements for the award of the degree

Doctor of Psychology (Clinical Psychology)

From

UNIVERSITY OF WOLLONGONG

by

Michelle S. Greene
B. Applied Psych (Hons)

Department of Psychology

2003
Declaration

I, Michelle S. Greene, certify that this thesis, submitted in partial fulfillment of the requirements for the award of Doctor of Psychology (Clinical Psychology) in the Department of Psychology, University of Wollongong, does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person where due reference is not made in the text.

Michelle S. Greene

31 March, 2003
Abstract

How people with depression are able to master their symptoms through psychotherapy has been a subject of considerable debate. Previous research indicates that an increased sense of mastery is indicative of lower depression, with gains in interpersonal mastery throughout therapy predicting better outcomes. The current study further investigates the concept of interpersonal mastery in relation to several common factors identified in the literature as instrumental to the effective treatment of depression: the therapeutic alliance, global functioning, perceived severity of personal problems, and the patient’s perception of improvement in mood. Thematic analyses were also undertaken. The aim of the study was to determine if mastery could assist in understanding the prediction of outcome. Specifically, it was anticipated that mastery would help to explain why some less theory-relevant methods (e.g. GAF) are useful in the prediction of therapeutic gains.

The sample consisted of 87 adults who took part in the Northfields Clinic depression program, comprising 16 sessions of psychotherapy. Depression and global functioning were assessed at intake and termination, self-reported problems were measured at intake, therapeutic alliance was assessed at week three of treatment, and the patient’s perception of improvement in mood was measured at termination. Mastery levels were ascertained by applying the Mastery Scale to transcripts taken from intake interviews, and were scored by two judges, with high inter-rater agreement.

Depression was found to be related to mastery levels at intake, such that higher levels of mastery were indicative of lower depression scores. This relationship, however, was not sustained at termination, or through residualised gain scores. The hypothesis that the therapeutic alliance would be related to mastery was not supported, suggesting that the concept of mastery is different from the ability to form an alliance. A more pervasive relationship, however, was found between mastery and global functioning measures, which was further supported by findings that patients with higher mastery levels reported greater improvements in mood. The perceived severity of personal problems was also unrelated to mastery, suggesting that as a construct, mastery reflects more than an absence of patient-reported problems.
Thematic analyses found that those who reported large improvements in mood at termination were more likely to express a strong sense of social support, identify clear incidents (rather than a global sense) of interpersonal difficulties, show signs of active help-seeking behaviour, and be able to identify positive as well as negative aspects of their life, with a more acute experience of depression. These themes are indicative of higher mastery scores (level 4). In contrast, those who regarded improvements to be very small were more likely to present themes that reflected lower levels of mastery (levels 1 – 2): isolation, hopelessness, a global dissatisfaction with life, and a more chronic experience of depression.

These findings indicate that certain qualities indicative of higher mastery should predict faster gains in therapy. For example, patients who are well engaged within a social unit and discuss their difficulties within the context of that unit (level 4) should respond quicker to therapy than those who express their difficulties without reference to others (e.g., level 1). As such, these results help ascertain how long a person may need treatment, explain the kinds of things clinicians should look out for, and enhance understanding regarding the relationship between severity of symptoms (GAF) and outcome.
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The past three years have been life changing in many ways. There were certainly times when I questioned my abilities, thought seriously about throwing in the towel, and felt like I would never fulfil my dream. Without the support of the following people, this project is unlikely to have been completed:

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To all of the staff at the University of Wollongong, I would like to express my delight at having the opportunity to learn from such a diverse, inspiring, and accomplished group of people. In particular, I would like to acknowledge Professor Frank Deane and Associate Professor Craig Gonsalvez, who provided kindness and gentle support at a time when I was faced with several personal challenges. The individual words of these two men inspired me to continue with the program, and face a traumatic experience head-on.

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Approximately one in every five Australian adults will suffer from depression at some point in their lives (Australian Bureau of Statistics, 1998). Termed the ‘common cold of psychiatry’ by Seligman (1975), depression accounts for 75 percent of all psychiatric hospital admissions (Judd, Paulus, Wells, & Rapaport, 1996; Boyd & Weissman, 1982), and is second only to hypertension as the most common chronic condition encountered in general medical practice today (Wells, Sturm, Sherbourne, & Meredith, 1996). For direct medical care alone, the cost to the Australian economy amounts to billions of dollars annually (Parker, Roy, Mitchell, Wilhelm, & Eyers, 2000; Cairns & Johnston, 1992).

Studies suggest that the incidence of depression is steadily rising (Australian Bureau of Statistics, 1998), with projections indicating that by the year 2020, depression could rival infectious diseases as the leading source of ill-health (Murray & Lopez, 1996). Approximately one third of patients who have had a single episode of major depression will have another episode within a year of discontinuing treatment (Lin, Katon, & Von Korff, 1998; Piccinelli & Wilkinson, 1994; Kendler, et al., 1993), and more than half will have a recurrence during their lifetimes (Kendler, Thornton, & Gardner, 2001; Kessling, Andersen, Mortensen, & Bolwig, 1998). In many depressed individuals, suicide is a significant risk (Commonwealth Department of Health and Aged Care and Australian Institute of Health and Welfare, 1999; Keller, 1993).

Clearly, depression is a problem that requires prompt and effective intervention (Ostir, Markides, Black, & Goodwin, 2000; Hirschfield, Keller, & Panico, 1997; Heston, 1992). While psychotherapy has long been recognised as an effective treatment (Asay & Lambert, 1999; American Psychiatric Association, 2000; Bergin & Lambert, 1999; Miller, Duncan, & Hubble, 1997; Schulberg, Pilkonis, &
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Houck, 1998; Rush, 1996), and several well-validated treatment methods exist (Leichensenring, 2001; American Psychiatric Association, 2000; Bergin & Lambert, 1999; Barber, Crits-Christoph, & Luborsky, 1996; Persons, Thase, & Crits-Christoph, 1996; Oei & Free, 1995; Keller, 1993; Elkin, et al., 1989; Free & Oei, 1989; Murphy, Wetzel, & Lustman, 1984), contention abounds as to ‘why’ psychotherapy for depression works, and ‘what’ the essential ingredients of successful therapies are (Potera, 1997; Kwon & Oei, 1994; Lambert & Bergin, 1994; Luborsky, Diguer, Luborsky, Singer, Dickter, & Schmidt, 1993; Stiles, Shapiro, & Elliot, 1986; Smith, Glass, & Miller, 1980).

Despite claims of superiority by proponents of many therapeutic approaches (Rush, Beck, Kovacs, & Hollon, 1977; Shaw, 1977), a significant body of research indicates that the differences in efficacy between prominent treatment modalities, such as Cognitive Behavioural Therapy (CBT) and Interpersonal Psychotherapy (IPT), are negligible, if any (Leichensenring, 2001; King, 1998; Garfield & Bergin, 1994; Luborsky, et al., 1993; Elkin, et al., 1989; Luborsky, Singer & Luborsky, 1975). These findings have prompted many researchers to question what the active agent of change within psychotherapy is, given that differences between therapy approach and content are acknowledged (Leichensenring, 2001).

That the ‘bells and whistles’ of therapy may be superfluous (Miller, Hubble, & Duncan, 1995) has led some researchers (Hubble, Duncan, & Miller, 2000; Greenberg & Foerster, 1996; Greenberg & Newman, 1996; Newcross & Newman, 1992; Beckham, 1990; Garfield, 1990; Herbst & Paykel, 1989; Coryell & Winokur, 1982) to consider Rosenzweig’s (1936) view that the effectiveness of therapies resides in what they have in common, rather than the theoretical tenets on which they are based.
Breaking from the tradition of competition between theoretical orientations, efforts have been made to identify the specific elements that make various treatments effective (Hubble, Duncan, & Miller, 2000). This shift in approach has seen an explosion of research looking at common factors (Weinberger, 1995).

In keeping with this, several factors have been found to predict therapy success. Firstly, research indicates that greater severity of depression, persistence of symptoms, and a higher number of prior episodes are the best predictors of recurrence (Schulberg, Pilkonis, & Houck, 1998; Katon, Lin, & Von Korff, 1994; Teri & Lewinsohn, 1986). This scenario of the “rich getting richer” has also been endorsed through research indicating that people with high levels of resourcefulness and coping skills respond much better to psychotherapy than their less equipped counterparts (Everson, Roberts, Goldberg, & Kaplan, 1998; Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988; Burns, et al., 1984). Similarly, therapy appears to be less effective when the patients are more severely depressed (Ostir, et al., 2000; Sotsky, et al., 1991; Thase, Simons, McGear, & Horden, 1991), are less motivated to succeed (Lecci, Karoly, Briggs, & Kuhn, 1994; Mackay, 1994; Aherns, 1987; Kuhl & Helle, 1986), or when they are especially perfectionistic (Blatt, et al., 1998) or self-critical (Blatt, et al., 1995). As such, therapy is likely to be more successful for individuals whose symptoms are less severe, are acute rather than chronic, are resourceful, motivated, and equipped with good coping skills, tend to be less self-critical, and have no prior history of depression.

The perceived level of social support has been identified as another common factor in therapeutic success, with Bosworth, Hays, George, and Steffens (2002) finding that decreased social support predicted poor depression outcome after a year.
Similarly, low satisfaction with social supports was also related to poor outcome (Ezquiaga, Garcia, Pallares, & Bravo, 1999; Bullers, 1999). Several therapists (Foster & Caplan, 1994; Klerman, Weissman, Rounsaville, & Chevron, 1984; Brown & Harris, 1978; Rowe, 1978) have observed that a common element to accounts of depression seems to be a sense (real or perceived) of isolation from others. For some, this isolation appears to be a central element determining distress in depression (Foster & Caplan, 1994), with narrative themes in therapy often relating to conflicts with others (Grenyer & Luborsky, 1996). Similarly, Beck (1991) notes that “harmonious interpersonal relationships act as a protective factor against the onset of depressive illness” (p.372).

Further, interpersonal conflicts have been linked with depression, with higher levels of personal problems predictive of poorer outcome (Greenberg & Malcolm, 2002; Stuart, 1998; Hollender & Ford, 1990). Consistent with this are findings relating the onset of depression to various social difficulties. These range from death of a loved one (Bruce, Kim, Leaf, & Jacobs, 1990), breakdown of relationships (Sands & Harrow, 1995), changes in role definition (Kendler, Thornton, & Gardner, 2001), parenthood (Hammen & Brennan, 2001; Raskin, Richman, & Gaines, 1990), loss of employment (Gottlieb, 1981, p. 45), and fears associated with loss of mobility/capability following diagnosis of health problems (Wells, Golding, & Burnam, 1989).

When combined, the above factors can be conceptualised as client (or extratherapeutic) factors, which are essentially ‘what patients bring to therapy’ (Hubble, Duncan, & Miller, 2000). According to Lambert (1992), this factor accounts for the greatest amount of change in therapy, amounting to approximately 40 percent
of outcome variance. This is in keeping with Luborsky et al.'s (1996) finding that the Global Assessment of Functioning (American Psychiatric Association, 1994) score was the largest contributor to outcome, and recognises the impact that current stressors, severity and diversity of symptoms, and social support networks can have on therapeutic outcome (Hubble, Duncan, & Miller, 2000).

The therapeutic alliance has also been identified as a common factor in predicting outcome success for depression (Martin, Garske, & Davis, 2000; Feeley, et al., 1999; Blatt, Sainslow, Zuroff, & Pilkonis, 1996; Krupnick, et al., 1996; Safran & Muran, 1995; Horvath & Symonds, 1991; DeRubeis & Feeley, 1990; Marmar, Gaston, Gallagher, & Thompson, 1989; Luborsky, et al., 1985; Hartley & Strupp, 1983; Bordin, 1979), with Wolfe and Goldfried (1988, p449), terming the alliance the "quintessential integrative variable" of therapy. Consistent with this, research indicates that very sick patients benefit from a highly supportive environment that bolsters their fragile self-esteem and enhances self-efficacy (Robertson, 1999). This indicates that a strong therapeutic alliance would enhance treatment success.

Similarly, several well-designed comparative studies (Barber, Connolly, Crits-Christoph, Gladis, & Siqueland, 2000; Luborsky, Singer, & Luborsky, 1975) have led researchers to postulate that the quality of the therapeutic alliance is central to the outcome of depression treatment.

Recent research (Meyer, et al., 2002), however, contends the relationship between therapeutic alliance and outcome, finding that patient's pretreatment expectations of therapeutic effectiveness predicted their active engagement in therapy, in turn leading to greater relative improvement. This view is in keeping with Joyce and Piper's (1998) findings that patient expectancies predicted facets of the
therapeutic alliance. In addition, research has been able to establish that only 30 percent of improvement can be attributed to the therapeutic alliance (Barber, Crits-Christoph, & Luborsky, 1996; Lambert, 1992), indicating that an additional factor is at work.

An expectancy or hope for improvement, and the placebo effect have also been nominated as important in the change process (Weinberger & Eig, 1999; Dykman, 1998; Garfield, 1994; Frank & Frank, 1991; Elkin, et al., 1989; Frank, 1973; Frank, Gliedman, Imber, Stone, & Nash, 1959), accounting for approximately 15 percent of the variance in client change. (Lambert, 1992). This does little for the therapist’s ego, but provides valuable information in support of the common factors as the preferential focus of treatment (Jones, Cumming, & Horowitz, 1988). Similarly, only 15 percent of outcome variance has been directly attributed to the particular techniques or models applied by the therapist in treatment (Lambert, 1992).

While some of the outcome variance in depression has been predicted by the above factors, it should be noted that most of these variables, while important, do not tend to provide direction as to what should be done in therapy, and when. Given that Tallman and Bohart (2000) asserts that more common factors are yet to be identified, the question “are there other common factor with direct therapeutic implications?” is prompted.

One promising variable is mastery, which states that the development by the patient of self-understanding of their problems, and more importantly, self-control within interpersonal relationships, should be related meaningfully to improvement. The importance of mastery has been acknowledged within many different schools of therapy (Weissman, 1995; Luborsky, et al., 1988; Beck, 1976; Frank, 1971; Freud,
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1920/1955), whereby enhanced patient mastery over their problems is seen as a collective goal in therapy. Grenyer (2001) asserts that mastery is a common element in all successful therapies, such that treatment efficacy can be measured in terms of increased levels of mastery achieved by the individual.

Defined as the “development of emotional self-control and intellectual understanding in relation to interpersonal relationships” (Grenyer, 1994), the concept of mastery acknowledges that within the context of therapy, individuals gain far more than the alleviation of symptoms. The level of self-understanding encompassed by mastery over their symptoms allows the individual to make connections between past maladaptive ways of dealing with conflicts and difficulties in current situations. The individual’s level of mastery, therefore, is ascertained through analysis of transference patterns and the narratives of conflicts with others that have been brought to therapy (Luborsky, Crits-Christoph, & Mellon, 1986). Given that insight has been termed “the cornerstone of dynamic change” (Anthony & Carkhuff, 1977), it is possible that the level of mastery (self-understanding and self-control) brought to therapy at intake is likely to be a good predictor of successful therapeutic outcome.

The idea of measuring mastery allows therapists to individualise the form of therapeutic approach to the patient’s current level of functioning. For example, if a patient’s narratives in therapy indicate that he/she currently has a low level of mastery, therapeutic intervention should focus on supportive (relationship enhancing) techniques to allow the person to feel secure and supported in the change process. Conversely, if a patient displays high levels of mastery, more expressive (insight enhancing) techniques are a suitable choice, in order to challenge the patient and assist in the facilitation of change (O’Connor, Edelstein, Berry, & Weiss, 1994).
Patients functioning at a moderate level of mastery will generally benefit from a balanced application of both supportive and expressive therapeutic input.

To date, only one study has investigated how psychotherapy helps depressed patients with respect to the particular pathways that are followed in the development of mastery (Grenyer, 2002). In this study (Grenyer, 2002), 30 patients diagnosed with depressive illness received 16 sessions of time-limited Supportive-Expressive (SE) Dynamic Psychotherapy for depression. Using transcripts taken from both early in therapy (sessions 3 and 5) and later in therapy (at the 90% completion mark), narratives of interactions called relationship episodes (REs) were selected, and scored using the mastery scale. Results indicated that changes in mastery during psychotherapy predicted changes in depression, such that large improvements in mastery resulted in significantly lower levels of depression at outcome (Grenyer, 2002). Conversely, individuals who recorded very little gains in mastery were still symptomatic at termination.

Grenyer (2002) observed interesting changes in the patterns of mastery improvement, such that for depressed individuals, changes in the interpersonal domain of the mastery scale appeared most important, with notable benefits being attributed to improvements in "references to questioning others" (item 4M) and "expressions of interpersonal self-assertion" (item 4P). Improvements in "expressions of insight into repeating personality patterns of the self" (item 5Q on the scale), was also noted as meaningful in the resolution of depression. Similarly, reductions in levels of mastery that fall in the lower range (relating to failures of mastery manifested by problems such as cognitive disturbances) were also implicated in the reduction of depression levels (Grenyer, 2002).
These results suggest that interpersonal patterns are important for successful recovery from depression. In particular, the development of confidence, self-assurance, and self-awareness of interpersonal styles, appear to be beneficial. This suggests that mastery may be a key factor in understanding why both cognitive and interpersonal methods of treating depression appear efficacious, as both therapies aim to develop mastery in their own way. In cognitive therapies, this is achieved through insight into cognitive distortions, while interpersonal therapies aim to develop self-control through the resolution of interpersonal problems and difficulties in relating to others.

While Grenyer’s (2002) work represents the foundation of research into mastery and therapeutic gains in the treatment of depression, the moderate sample size of that study did not have sufficient power to predict outcomes. As such, the promising results thus far make further investigations into the process and predictors of change pertinent. The current study aims to address this need through looking at the relationship between intake levels of mastery and treatment outcome, using a larger sample size.

While several studies have measured the changes that occur during treatment, it is possible that the prediction of outcomes prior to therapy could provide information that is more psychologically pertinent to therapy itself. Through identifying the particular mastery level of a patient prior to treatment, the therapist may be able to predict reasonable outcome goals, and modify treatment accordingly.

The relationship between intake mastery and outcome variables may also help identify the qualities that an individual needs in order to benefit from therapy. For
example, if the ability to form a therapeutic alliance is due to pre-therapy factors, what are they? If early insight and self-understanding are required, the patient may need a certain level of mastery.

Similarly, research has shown that global functioning predicts outcome (Schulberg, Pilkonis, & Houck, 1998; Katon, Lin, & Von Korff, 1994; Teri & Lewinsohn, 1986), but the reasons for this are currently unknown (Weinberger, 1995). This study aims to investigate if mastery could potentially hold the key.

Several hypotheses were postulated. The first and last research questions replicate Grenyer's (2002) work using a much larger sample, while the remaining hypotheses represent identified areas requiring further investigation, and hence are original to this study.

Firstly, it was anticipated that an increased level of mastery at intake would be indicative of lower intake depression scores, reflecting the finding by Grenyer (2002) that mastery and depression are inversely related.

In recognition of the importance of a solid working alliance in the treatment of depression (Luborsky, et al., 1985), it was hypothesised that higher levels of mastery at intake would be predictive of earlier formation of a strong therapeutic alliance, as measured three weeks into treatment.

It was also hypothesised that an increased level of mastery at intake would be indicative of better prognosis using a time-limited Supportive-Expressive (SE) treatment of depression. This is in accordance with Street (1999) who found that patients who were more 'well' at intake were more likely to experience faster
improvements in therapy, and is useful in identifying those patients who are likely to respond more favourably to treatment.

In accordance with Everson’s (et al., 1988) findings, it was anticipated that patients with lower levels of overall functioning would have lower intake mastery scores, as well as higher levels of depression, at both intake and termination.

Similarly, the patient’s self-reported change in mood as a result of therapy was expected to be lower for those individuals who had a low mastery score at intake.

The relationship between the perceived severity of personal problems and levels of depression was also investigated, with the expectation being that individuals who report more severe personal problems would have higher levels of depression and lower levels of mastery at intake, and visa-versa.

Individual patterns of changes in mastery were also deemed worthy of investigation, with results expected to reflect Grenyer’s (2002) findings that gains in "references to questioning others" (item 4M), "expressions of interpersonal self-assertion" (item 4P), and improvements in "expressions of insight into repeating personality patterns of the self" (item 5Q on the scale), are positively related to improvements in depression. Further, reductions in mastery scores falling within the lower ranges (levels 1 to 3) were expected to reflect the upward trend of improvements in mastery. Understanding the pattern in which mastery gains reflect reductions in depression is important, as it could potentially provide therapists with particular target areas to address within the therapeutic relationship.
Method

Participants

The sample consisted of 87 adults (35 males and 52 females), ranging in age from 18 to 70 years (M = 45.3 years, SD = 12.5 years), who fulfilled criteria for a primary diagnosis of major depression, seen at Northfields Clinic, University of Wollongong. An extensive screening interview was conducted by an experienced psychologist and psychodiagnostician, which included DSM-IV (American Psychiatric Association, 1994) evaluation of Axis I and Axis II disorders. In addition, The Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), Hamilton Rating Scale for Depression (HRSD-17) (Hamilton, 1960), and the Inventory of Interpersonal Problems (IIP-64) (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) were administered at this time.

Certain diagnoses were excluded: current substance abuse, antisocial personality, agoraphobia, schizophrenia, and organic brain disorder. Patients currently using antidepressant medication were not excluded.

Treatment and Therapists

The treatment consisted of 16 sessions of time-limited Supportive-Expressive (SE) Dynamic Psychotherapy for depression, administered according to a specific manual (Luborsky, et al., 1995) based on the general SE psychotherapy manual (Luborsky, 1984). This form of treatment has received empirical support (Crits-Christoph & Connolly, 1998). Each psychotherapy session was either audiotaped or videotaped with the patient’s and therapist’s informed consent.

Nine advanced clinical psychology interns comprised the therapists. All therapists were experienced and had received extensive training, and were supervised
weekly by a clinical psychologist experienced in time-limited Supportive-Expressive Dynamic Psychotherapy who monitored adherence to the SE model.

Measures

The patients were assessed before treatment, at several points during treatment (3, 6, 9, and 12 weeks), and at termination. The Mastery Scale was applied to intake transcripts to provide baseline data within this study.

Depression was assessed (in addition to the structured intake interview) using both the Hamilton Rating Scale for Depression (HRSD-17) and the Beck Depression Inventory (BDI). A well-validated measure (Lambert, Hatch, Kingston, & Edwards, 1986; Knesevich, Biggs, Clayton, & Ziegler, 1977; Hamilton, 1960), the HRSD-17 is an observer-rated scale consisting of 17 items. Considered to be the gold standard in assessing depression severity (Rabkin & Klein, 1987), the HRSD-17 correlates highly with psychiatrists’ global ratings (Knesevich, et al., 1977), and provides a significantly larger index of change than patient self-report instruments (Lambert, et al., 1986). While the HRSD-17 was used for all analyses, a cut-off score of 17 or more on the HRSD-21 was required for admittance into the treatment program. The HRSD-17 was administered during the screening interview prior to beginning treatment, and again at termination.

The Beck Depression Inventory (BDI) is a 21-item questionnaire completed by the patient that assesses the severity of depressive symptoms (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Total scores range from 0 to 63, with scores of 9 or below considered to be within the normal range. Scores of 10 to 18 indicate mild-to-moderate depression, scores of 19 to 29 indicate moderate-to-severe depression, and scores of 30 or higher indicate severe depression. The BDI was administered during treatment, at weeks 3, 6, 9, 12, as well as in the termination session at week 16.
Self-reported problems were assessed at intake using the Inventory of Interpersonal Problems (Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988). Consisting of 64 items, the IIP-64 is a self-report instrument that measures the degree of distress from interpersonal problems. Items are organised into two sections: items relate to behaviours that are "hard to do", and other items relate to behaviours that are "done too much". Each item is rated on a 5-point Likert-type scale (0 = not at all distressed; 4 = extremely distressed), reflecting the degree of distress experienced, with higher scores indicating a greater degree of perceived distress. Test-retest reliability of between .89 and .98 was reported (Horvath, Rosenberg & Bartholomew, 1993), along with internal consistency ranging between .89 and .94.

The Therapeutic Alliance was measured using the ‘Client’ version of the Working Alliance Inventory (WAI) (Horvath & Greenberg, 1989), at week three in therapy. The WAI is a 36-item self-report inventory designed to measure the quality of the therapeutic, or otherwise working, alliance. It consists of Bond Development, Goal Agreement, and Task Agreement subscales, as well as an overall alliance index. Each subscale consists of 12 items scaled in a seven-point Likert-type format. Items from the "WAI (Client Form)" include, "I believe (my counsellor) is genuinely concerned with my welfare," and "I am confident in (my counsellor's) ability to help me." Reliability for the client version is a reported alpha of .93 and for the counsellor version, .87 (Horvath & Greenberg, 1989). Subscale alphas range from .68 to .92. Good convergent, concurrent, and predictive validities were reported.

Mastery was measured at intake using The Mastery Scale, a reliable and well-validated measure (Grenyer & Luborsky, 1998) developed by Grenyer (1994) to study the working-through process that occurs within psychotherapy. Applied to narrative clauses that include descriptions of relationships (the five-minute speech sample
method; Grenyer, 2002), the Mastery Scale consists of 23 categories (1A to 6W) over six levels relating to stages of self-understanding and self-control. Lower levels of mastery (scores 1 and 2) relate to failures of mastery manifested by problems such as cognitive disturbances. Moderate levels of mastery (scores 3 and 4) reflect the individual’s struggle to improve, as evidenced by self-questioning perceptions of relationship conflicts. Good levels of mastery (scores 5 and 6) display an awareness of one’s transference patterns, and the derivation of pleasurable experiences from relationships. Readers interested in further details of the Mastery Scale are directed to Grenyer (2002).

Global functioning was determined using three measures: the Global Assessment of Functioning (GAF) Scale, the Global Assessment of Relational Functioning (GARF), and the Social and Occupational Functioning Assessment Scale (SOFAS). Each of these measures can be found in the DSM-IV (American Psychiatric Association, 1994).

The GAF is the most commonly used measure of adaptive functioning/impairment in mental health settings (Bacon, Collins, & Plake, 2002), and is also regarded as a good measure of symptom severity (Kopera, 2002). When clinicians administering the scale have been adequately trained (as in this study), the GAF provides a valid (Startup, Jackson, & Bendix, 2002) and reliable (Bates, Lyons, & Shaw, 2002) assessment of a client’s level of functioning (Kopera, 2002).

The GARF scale is used for assessing relationship functioning, and was designed for applicability in a variety of settings (Rosen, McCollum, Middleton, Locke, & Bird, 1997). Looking at joint problem solving, organisation, and emotional climate within the client’s relationships (Group for the Advancement of Psychiatry, 1996), results indicate that the GARF has both high reliability (Dausch, Miklowitz, &
Richards, 1996) and construct validity (Ross & Doherty, 2001; Rosen, et al., 1997). The scale is also considered to be a highly dependable measure across populations and raters (Mottarella, Philpot, & Fritzsche, 2001).

Similarly, the SOFAS measures the client’s level of functioning in relation to both social and occupational domains. Found to have very high reliability and validity (Hilsenroth, Ackerman, Blagys, Baumann, Baity, Smith, Price, Smith, Heindselman, Mount, & Holdwick, 2000), the SOFAS is not influenced by the overall severity of the individual’s psychological problems (American Psychiatric Association, 1994).

Change in Mood was measured using a scale developed for the purposes of this study. Essentially, patients were asked at the end of treatment to rate the improvements in their mood using a 100-point improvement scale. Specifically, patients were asked to complete the following statement: “As a result of my treatment over the past sixteen weeks I would rate that my mood is…”, giving a numerical rating between zero and 100, where zero equals “much worse”, 50 equals “the same”, and 100 equals “much better”.

Procedure

Verbatim transcripts extracted from the screening interview formed the database. These speech samples consisted of uninterrupted, non-guided individual expressions of the patient’s current social functioning, general quality of life, and the quality of current relationships.

Two judges were appointed to undertake scoring, and consisted of two doctoral students in clinical psychology at the University of Wollongong. Training in scoring the mastery scale was provided by the scale’s creator (Grenyer, 1994), and continued until an interrater reliability of >.90 was achieved.
To facilitate the process of scoring, one judge was responsible for the clausing of all transcripts. Transcripts were then randomised, and scorers were not notified of the patients’ identity or gender. All the data was scored twice, with one of the 23 Mastery Scale categories assigned to each of the identified scorable clauses. Mastery Scale scores were then calculated for each narrative by summing all the scores and dividing by the number of scorable clauses to arrive at a mean score per narrative, reflecting the overall level of mastery exhibited by each patient at intake.

Analyses

The Kolmogrov-Smirnov tests for normality were not significant for the following variables: mastery (KS = .05, p = .20), BDI (KS = .08, p = .20), GAF (KS = .09, p = .07), WAI (KS = .07, p = .20), and IIP (KS = .11, p = .10), indicating a non-linear distribution. Shapiro-Wilk tests for nonnormality also revealed a non-linear distribution. As such, Kendall’s Tau nonparametric correlations were chosen, and conducted between the following variables: intake mastery and depression (using BDI and HRSD at intake and termination); intake mastery and the therapeutic alliance (WAI at week three); intake mastery and measures of global functioning (GAF, GARF, & SOFAS at both intake and termination); intake mastery and perceived personal problems (IIP at intake and termination); intake mastery and clients reported improvement in mood (at termination); and therapeutic alliance (WAI) and BDI at weeks three, six, and nine of treatment.

Standardised residual gain scores were determined using linear regression, with the dependant variable comprising the termination score, and the independent variable the intake score.

Qualitative analyses were also conducted as a means of taking a more sophisticated and deeper approach towards measuring an individual’s experience of
Depression (Parker, et al., 1998; Jennings, 1986). As such, data derived from intake transcripts were analysed in relation to predominant themes contained within their mastery score. For information on thematic analyses, readers are directed to White and Grenyer (1999). This data was then analysed in relation to the individual’s depression scores at both intake and termination.

Results

Preliminary Analyses

Interrater reliability: Correlation analysis revealed a high level of interrater reliability \(r = .78, p = .00\) for the Mastery Scale, and as such, judge’s scores were pooled for all subsequent analyses.

Completion rates of therapy: Of the 87 patients who began treatment, 13 (15%) dropped out, leaving 74 patients who completed the entire course of therapy. There was no difference in mastery scores between drop outs and completers \((F = 1.60, p = .12)\). All subsequent analyses were undertaken using the sample of patients who completed the entire course of therapy.

Depression: Mean depression scores at the start of treatment were 26.5 (SD = 8.6) when measured using the BDI, and 23.4 (SD = 4.8) for the HRSD-17. At termination, these scores were 14.0 (SD = 11.6) and 11.6 (SD = 7.3), respectively (see Figure 1 for a depiction of HRSD-17 scores). Of the 74 patients that completed 16 weeks of therapy, 50 (68 %) no longer met DSM-IV criteria for major depression. A paired t test was significant for both the BDI \((t = 9.12, p = .00)\) and the HRSD-17 \((t = 14.88, p = .00)\), indicating significant improvement over the course of therapy.
Figure 1. Average depression scores at intake and termination as measured using the HRSD-17 (Error Bars represent SE).

Mastery and Outcome Measures

Table 1 presents a summary of Kendall's Tau correlations between mastery and the various outcome variables, measured at both intake and termination.

Table 1
Relationship Between Intake Mastery Scores and Outcome Variables

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Correlation with variable at intake</th>
<th>Intake Mastery</th>
<th>Residualised Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N = 87</td>
<td>N = 74</td>
<td>N = 74</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>-.32**</td>
<td>-.13</td>
<td>-.04</td>
</tr>
<tr>
<td>HRSD</td>
<td>-.26**</td>
<td>-.09</td>
<td>-.01</td>
</tr>
<tr>
<td>Therapeutic Alliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WAI - patient</td>
<td>.13</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Global Functioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAF</td>
<td>.28**</td>
<td>.17*</td>
<td>.06</td>
</tr>
<tr>
<td>GARF</td>
<td>.21**</td>
<td>.14*</td>
<td>.04</td>
</tr>
<tr>
<td>SOFAS</td>
<td>.25**</td>
<td>.17*</td>
<td>.11</td>
</tr>
<tr>
<td>Improvement in Mood</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIP</td>
<td>-.14</td>
<td>-.11</td>
<td>-.09</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01. N/A indicates not applicable, as measures not administered at that time.
Mastery and Depression: A significant negative relationship was found between mastery and depression, as measured at intake using both the BDI and the HRSD-17 (see figure 2 for a depiction of the relationship between mastery and intake HRSD scores). It should be noted that while the graphical representation of Figure 2 suggests the presence of outliers, close inspection of the data revealed no cause for removal of these variables. Termination and residual scores for the depression and mastery, however, were not significant using either the BDI or the HRSD-17.

![Graph showing the relationship between depression and mastery.](image)

*Figure 2.* Relationship between depression at intake (as measured by HRSD-17) and mastery.

Mastery and Therapeutic Alliance: Using Kendall’s Tau correlations, no significant relationship between intake mastery and the WAI at week three was found. This suggests that mastery is not necessarily a measure of the ability to form an alliance.
Mastery and Global Functioning: Positive relationships were found between intake mastery and all three measures of global functioning, both at intake and termination of therapy. Kendall’s Tau correlations between intake mastery and the GAF were quite strong at intake, and remained significant at termination.

Similar results were also found for intake mastery and the GARF at intake and termination, as well as between intake mastery and the SOFAS at intake and at termination.

Mastery and Improvements in Mood: A significant positive relationship between intake mastery and self-reported improvements in patient mood at termination was found. As can be seen in Figure 3, those patients with higher mastery scores tended to report greater improvements in mood at termination. Despite the appearance of possible outliers in Figure 3, close inspection of the data revealed no reason to remove these variables from analysis.

![Figure 3](image_url). Relationship between mastery level and self-reported improvement in mood.
Mastery and Interpersonal Problems: The relationship between intake mastery and IIP was not significant, suggesting that mastery is not just a reflection of client-reported problems.

Individual Patterns of Mastery: Analyses of individual mastery level scores revealed that as a percentage of total scorable clauses, approximately half of all scores were from Level 2 of the Mastery Scale. Figure 4 represents the distribution of scores from each of the six levels of mastery.

\[\text{Figure 4. Average mastery scores according to mastery levels.}\]

Further analyses were conducted to investigate the differences in mastery level scores between patients who remitted post-treatment, and those who remained depressed. As can be seen in Figure 5, the most obvious difference was in level 2, with patients who remitted receiving higher scores, \(F(15, 71) = 3.03, p < .001\).
Thematic Transcript Analyses

Using patient's self-reported improvements in mood, the ten least (M = 41.5, Range = 10 - 50) and ten most improved (M = 91, Range = 90 - 100) patients' transcripts were selected for thematic comparison. Table 2 depicts selected significant statements from these transcripts, along with their formulated meanings. As can be seen, the themes brought to therapy by each group were quite distinct. These themes, when linked to particular mastery scores, reflect the general mastery level each group appear to be functioning at. With regard to the patients who remained depressed at termination, the themes of isolation 2H, hopelessness 2I, life dissatisfaction 2E, and a chronic experience of depression 1A were dominant, suggesting that the members of the sample who reported a poorer prognosis tended to be functioning at a mastery level between 1 and 2.
Conversely, patients who reported the greatest improvements in mood expressed general themes relating to a strong sense of social support (particularly instrumental support), clear incidents of interpersonal difficulties (particularly parenting issues) level 4, signs of active help-seeking behaviour 3K, and a more balanced view of life 6U, with recognition that despite the challenges, there are still some positive events worth mentioning. This group also tended to describe their depression as acute rather than chronic. With regard to mastery level, it appears that the portion of the sample with a better prognosis tended to be functioning at around mastery level 4.

Table 2
Selected examples of significant statements made by patients who had the greatest and least improvements in mood at termination.

<table>
<thead>
<tr>
<th>Significant statements</th>
<th>Formulated meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Patients reporting poor improvement in mood</strong></td>
<td></td>
</tr>
<tr>
<td>a. Even though I put myself in a lot of places socially, I'm still utterly isolated.</td>
<td>a. Patients reported a sense of isolation, regardless of social activity.</td>
</tr>
<tr>
<td>b. I don't like my life at all. I don't see any good things at the moment</td>
<td>b. Patients expressed a global dissatisfaction with life</td>
</tr>
<tr>
<td>c. I'm fighting most of the time to hold back tears. I feel suicidal every day.</td>
<td>c. Patients expressed a sustained sense of hopelessness</td>
</tr>
<tr>
<td>d. For about five years, I've been in a process of breaking down. I could feel all of this coming back on again.</td>
<td>d. Patients described their depression as chronic rather than acute.</td>
</tr>
<tr>
<td><strong>2. Patients reporting greatest improvement in mood</strong></td>
<td></td>
</tr>
<tr>
<td>a. My partner is very supportive, and my Mother-in-Law helps out with the kids.</td>
<td>a. Patients reported examples of strong social support, particularly instrumental support.</td>
</tr>
<tr>
<td>b. My son's behaviour is killing me.</td>
<td>b. Patients described several interpersonal difficulties, with parenting a predominant theme.</td>
</tr>
<tr>
<td>c. I'm trying hard to get as much help as I can.</td>
<td>c. Patients appeared to be actively seeking help.</td>
</tr>
<tr>
<td>d. Life has become like a roller-coaster for the past couple of months, but it's not all bad.</td>
<td>d. Patients describe their depression as acute, and recognise the positive aspects of life, despite current challenges.</td>
</tr>
</tbody>
</table>
Table 3 provides an overview of the percentage of Mastery Scale items endorsed by patients who reported the most improvement compared to those who reported little improvement in mood.

Table 3
Mastery Scale items endorsed by patients who reported the greatest and least improvements in mood at termination.

<table>
<thead>
<tr>
<th>Mastery Scale Item</th>
<th>Endorsed (%)</th>
<th>Patients Reporting Most Improvement</th>
<th>Patients Reporting Least Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 - Lack of Impulse Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1A Expressions of Being Emotionally Overwhelmed</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>1B References to Immediacy of Impulses</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1C References to Blocking Defenses</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>1D References to Ego Boundary Disorders</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Level 2 - Introjection and Projection of Negative Affects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2E Expressions of Suffering From Internal Negative States</td>
<td>17</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>2F Expressions Indicative of Negative Projection Onto Others</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2G Expressions Indicative of Negative Projection From Others</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2H References to Interpersonal Withdrawal</td>
<td>2</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2I Expressions of Helplessness</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Level 3 - Difficulties in Understanding and Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3J Expressions of Cognitive Confusion</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3K Expressions of Cognitive Ambivalence</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3L References to positive Struggle With Difficulties</td>
<td>12</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Level 4 - Interpersonal Awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4M References to Questioning the Reactions of Others</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4N References to Considering the Other's Point of View</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4O References to Questioning the reaction of the Self</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4P Expressions of Interpersonal Assertion</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Level 5 - Self-Understanding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5Q Expressions of Insight Into Repeating Personality Patterns of Self</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5R Making Dynamic Links Between Past and Present Relationships</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5S References to Interpersonal Union</td>
<td>15</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>5T Expressions of Insight into Interpersonal Relations</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Level 6 - Self-Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6U Expressions of Emotional Self-Control Over Conflicts</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6V Expressions of New Changes in Emotional Responding</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6W References to self-Analysis</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen, the transcripts of patient's who reported greater improvements in their mood appeared to reflect less expressions of suffering from internal negative states 2E, more references to considering the other's point of view 4N, and more references
to interpersonal union. Conversely, transcripts of patients who reported the least amount of improvement in their mood appeared to reflect more references to blocking defenses and higher interpersonal withdrawal.

Discussion

The current study focused on testing hypothesised processes of change in the treatment of depression. Consistent with previous research (Grenyer, 2002), findings indicate that psychotherapy is efficacious in the treatment of depression. In particular, mastery extends support to the theoretical standpoint that interpersonal relationships are of central importance to the issue of depression (Weissman, 1995; Luborsky, et al., 1988), whereby depression is a product of difficulties in relating to others. Given that mastery involves the development by the patient of self-understanding of their problems, and more importantly, self-control within interpersonal relationships, the results of this study suggest that aspects of mastery contribute to a patient's ability to benefit from therapy.

Main findings

As predicted, an increased level of mastery at intake was indicative of lower intake depression scores, and conversely, lower mastery at intake was related to higher levels of intake depression. This was consistent with Grenyer's (2002) findings that mastery and depression are inversely related. Further, these findings lend additional support to the long-held notion that an increased sense of mastery over one's problems is an indicator of fewer symptoms (Weissman, 1995; Luborsky, et al., 1988; Beck, 1976; Frank, 1971; Freud, 1920/1955). Beck (1976) asserted that mastery is the common goal of all therapies, reflecting the idea that mastery itself is not related to one particular form of treatment. While the Mastery Scale has only been applied to
the supportive-expressive treatment of depression, there is no reason to assume that
the results of the current study are unique to the supportive-expressive model, or
could not be replicated using another interpersonally-oriented form of therapy
(Weissman, 1995).

Similarly, the descriptive information derived from the thematic comparison
of transcripts supported the findings derived from the quantitative statistical analyses,
revealing that patients who reported greater improvement following therapy tended to
be those who had been operating at higher levels of mastery (level 4) than those with
poorer prognosis, who tended to have responses categorized under low mastery levels
(especially at level 2). Patients who reported a more chronic pattern of depression also
tended to report less improvement in mood than those whose experience of depression
had been more acute. In addition, analyses of mastery level in relation to depression
at termination revealed that patients who remitted following treatment tended to have
a greater number of level 2 scores (expressions of suffering from negative internal
states), reflecting more acute-type symptoms.

The relationship between low mastery levels and depression raises the
question whether mastery is little more than a negative attitude towards oneself and
part of the disorder’s symptomatology, or whether it might be a marker for good
prognosis in psychotherapy. Grenyer’s (2002) research applying the Mastery Scale to
the treatment of personality disorders and substance dependence appears to suggest
that mastery patterns and the progression of change in mastery scores is more
indicative of the latter hypothesis. Further research is clearly warranted in this area, as
are studies that investigate whether changes to mastery observed in the current study
also occur when negative and positive outcomes are observed following the uses of
other therapeutic approaches including pharmacotherapy.
Global functioning was also related to mastery, such that higher levels of mastery at intake were indicative of higher levels of global functioning. This relationship held for all measures of global functioning: relational, social, and occupational. Given that a significant relationship was maintained at termination (unlike that of depression and mastery), this indicates that the concept of mastery encompasses a general sense of well-being that is not exclusively governed by the presence or absence of depressive symptoms.

Further, these findings provide support for the notion of the "rich getting richer", whereby those patients with more severe or incapacitating symptoms face a poorer prognosis (Luborsky et al., 1988). Similarly, these findings are consistent with research indicating that greater severity of depression, persistence of symptoms, and a higher number of prior episodes are the best predictors of recurrence (Schulberg, Pilkonis, & Houck, 1998; Katon, Lin, & Von Korff, 1994; Teri & Lewinsohn, 1986). This notion was also reinforced by the finding that a more chronic experience of depression tended to be reported by patients who felt they had made few gains in therapy.

Perhaps most importantly, patient's self-rated improvement in mood at termination was positively related to mastery, suggesting that interpersonal mastery may be an effective predictor of therapeutic gains. As Rowe (1978) notes, the patient's subjective perception of well-being is often more accurate than clinician ratings with regard to the experience of depression.

The importance of this was also reflected in transcript themes, whereby content reflecting low levels of mastery, such as isolation, hopelessness, life dissatisfaction, and chronic feelings of depression were expressed by patients who remained depressed at termination, giving valuable information regarding those
patients who tend not to experience therapeutic gains over a 16-week period. This is consistent with Bosworth, Hays, George, and Steffens’ (2002) finding that decreased social support predicted poor depression outcome after a year.

These results also lend support to previous findings that a sense of isolation (real or perceived) from others is indicative of greater distress in depression (Foster & Caplan, 1994; Klerman, et al., 1984; Brown & Harris, 1978), while harmonious interpersonal relationships are a protective factor against the onset of depressive illness (Beck, 1991).

Similarly, transcript analyses gleaned information about those patients who reported improved symptoms, or remitted following treatment. Themes brought to therapy by these patients tended to be at a higher level of mastery (level 4), and were focused on a strong sense of social support, interpersonal issues, active help-seeking behaviour, and recognition that not everything in their life is intolerable.

Secondary findings

The finding that the therapeutic alliance was not related to mastery provided useful information about interpersonal mastery as a construct, indicating that it encompasses more than the ability to form an alliance. This is pertinent, as the therapeutic alliance has been identified as a common factor in the treatment of depression (Martin, Garske, & Davis, 2000; Feeley, et al., 1999; Blatt, Sainslow, Zuroff, & Pilkonis, 1996; Krupnick, et al., 1996). As mastery appears to be measuring something other than alliance, yet remains important to global functioning and improvement in depressive symptoms, it is possible that mastery may be the ingredient that assists in the activation of change.

Similarly, the patient’s perceived severity of interpersonal problems was not found to be significantly related to mastery, indicating that the construct of
interpersonal mastery is not merely a measure of the presence or absence of interpersonal difficulties experienced in the patient’s life. As previously noted, interpersonal conflicts have been linked with depression, with higher levels of personal problems predictive of poorer outcome (Greenberg & Malcolm, 2002; Stuart, 1998; Hollender & Ford, 1990). Again, mastery appears to be measuring a part of depression that is not represented by interpersonal problems, suggesting that it may be important for success in therapy to occur.

Implications for further research and clinical practice

The findings of this study indicate that aspects of mastery contribute to the ability to benefit from therapy. As noted, information regarding common factors is readily available (Hubble, Duncan, & Miller, 2000; Greenberg & Foerster, 1996; Greenberg & Newman, 1996; Newcross & Newman, 1992; Beckham, 1990; Garfield, 1990; Herbst & Paykel, 1989; Coryell & Winokur, 1982), yet the reasons why such factors are effective in predicting outcome remain elusive. Given Luborsky et al.’s (1996) finding that the Global Assessment of Functioning (GAF) (American Psychiatric Association, 1994) score was the largest contributor to outcome, the relationship between mastery and global functioning revealed in this study provides valuable insight into the process and predictors of change.

As reported earlier, GAF scores were higher for those patients with higher mastery scores (and vice versa). This suggests that mastery may be a component of the GAF, contributing to its usefulness as a predictor of therapeutic outcome.

The implications for therapy from such findings are extensive. Firstly, if mastery is a central component to overall functioning, clinicians may be able to determine the likelihood of a patient improving through psychotherapy by analyzing their intake mastery levels. As noted, those patients who present themes in therapy
dominated by lower mastery scores (levels 1 - 2) are less likely to have strong therapeutic gains. Conversely, those patients whose therapeutic themes reflect higher levels of mastery at intake (level 4 and above) tend to report superior gains in therapy.

Armed with such knowledge, clinicians are able to work towards promoting mastery in those clients who are operating at lower levels, helping them to move forward. As Grenyer (2002) notes, the therapist can determine when a patient is ready to end therapy by observing the self-understanding and self-control markers that are central to mastery. By handling the relationship in response to these, the therapist can balance the supportive and expressive techniques used in order to respond to the patient at their current level of mastery. For a more comprehensive account of the matching process between mastery level and therapeutic approach, the reader is directed to Grenyer (2002, Ch. 6).

Several limitations of the study should also be noted. Firstly, the therapy administered went for a total of 16 weeks, which may not have been suitably long to detect changes in those patients with lower levels of mastery at intake. Also, the therapists used a supportive-expressive approach to treatment, but not all of the therapists were familiar with the concept of mastery or the mastery scale. As such, the therapists participating in the trial were not modifying their therapeutic approach in accordance with mastery levels. This may have had an impact on the perceived improvements in mood, whereby patients who experienced a disparity in therapeutic approach for their level of functioning may have felt that their gains in therapy were minimal.

In addition, research investigating the relationship between mastery and self-efficacy is also warranted. Given that the relationship between depression and self-efficacy is well established (Hubble, Duncan, & Miller, 2000), it is imperative to
understand whether mastery and self-efficacy are measuring different aspects of depression, or are simply part of the same construct. Given that mastery includes the development of self-understanding and self-control within the context of interpersonal relationships, it is likely that an increased sense of self-efficacy within these relationships would also occur. As such, it is pertinent to investigate the extent to which the two constructs overlap and/or contribute to depression. Based on Grenyer’s (2002) conceptualization, it would be predicted that mastery is more specific and would have better predictive power with regard to psychotherapy outcome than more global notions of self-efficacy.

Similarly, the current study did not measure patient’s mastery levels at the termination of therapy. While important relationships were found using intake mastery as a predictor, further research is required to determine whether patients make faster gains in therapy if techniques are matched to their mastery levels. Further, additional replications of Grenyer’s (2002) work using a large sample size are required to ascertain if particular patterns of mastery changes through psychotherapy are reflective of faster therapeutic gains.

Further research could also apply the Mastery Scale to other forms of treatment to investigate the generalisability of the findings across a variety of interpersonally-related theoretical orientations. While the applicability of mastery to a patient’s recovery is well-documented (Grenyer, 2002; Beck, 1976), the ability of various treatment modalities to achieve a change in mastery is not yet known.

In addition, the male to female ratio in the current study was not evenly balanced. Future research may benefit from having a more equal distribution. Further research into mastery may also benefit from looking at therapy for disorders other than depression. As Grenyer (2002) suggests, the concept of mastery is likely to have
widespread applicability. This makes research into the prediction of therapeutic gains using interpersonal mastery all the more pertinent.

References


Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies: Is it true that 'everybody has won and all must win prizes'? *Archives of General Psychiatry, 32*, 995-1008.


