Journal of Psychology and Behavioral Science June 2015, Vol. 3, No. 1, pp. 37-43 ISSN: 2374-2380 (Print), 2374-2399 (Online) Copyright © The Author(s). 2015. All Rights Reserved. Published by American Research Institute for Policy Development DOI: 10.15640/jpbs.v3n1a4

URL: http://dx.doi.org/10.15640/jpbs.v3n1a4

Evidence for Rapid Decrease in Self-Reported Psychological Distress During Initial Phase of Psychotherapy

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Abstract

While research findings have provided support for sequential stage models of counseling and psychotherapy, more study is needed regarding change within specific phases and stages. This study employed a large, archival outpatient sample (n=772 at Session 1) at a college counseling center to conduct a series of exploratory analyses examining the level and amount of change in 20 self-reported psychological symptoms and functioning variables during early sessions of psychotherapy. Findings replicate previous research showing rapid change during early sessions, but with psychological distress emerging as a key construct. Nearly 90% of clients entered therapy reporting moderate to high distress, and only distress scores evidenced a initial, large decrease. Clients who reported high distress also showed the largest overall improvement during early sessions. Males appeared to under-report initial distress, raising questions about the validity of self-reported distress with men. Interpretation of these results provide an expanded description of the initial, remoralization stage of psychotherapy with implications for research and clinical practice.

Keywords: Psychological distress; remoralization phase of psychotherapy; Behavioral Health Questionnaire; progress monitoring; help-seeking

Sequential stage models of psychotherapy propose that eventual positive outcomes relate to the occurrence of certain processes over the course of therapy (Callahan, Swift, & Hynan, 2006; DiClemente & Prochaska, 1982; Howard, Lueger, Maling, & Martinovich, 1993; Howard, Moras, Brill, Martinovich, & Lutz, 1996; Prochaska, 1995; Prochaska & Norcross, 2006). Howard et al. (1996), for example, described a phase model of psychotherapy consisting of remoralization, remediation, and rehabilitation. Individuals in the first phase are demoralized in that their feelings of subjective well-being can be described as hopeless and disheartened (Frank, 1974; Yalom & Leszcz, 2005); Howard et al. (1996) described such persons as desperate and unable to cope. Phase theories indicate that interventions aimed at reducing client distress early in treatment may be crucial to improving clients' sense of hope, satisfaction with the therapist and/or treatment, and initial progress. Recognized theoretically as a major motivational factor for seeking therapy (Clarkin & Levy, 2004; Frank, 1974), clients' feelings of distress about their symptoms may help them to overcome the stigma associated with participating in therapy (Clarkin & Levy, 2004; Teyber & McClure, 2011). Clients may present with concerns about being abnormal or mentally ill or view their psychological and physical symptoms as signs of their inability to cope with personal problems. In the stages of change model (Prochaska, 1995; Prochaska & Norcross, 2006), the client moves through 5 stages involving degrees of preparation, action, and maintenance. In the precontemplation stage, when a client has minimal awareness of a major problem, the client experiences little distress and motivation to seek help. In the next phase, contemplation, the client becomes aware of the problem and begins to think about how to remedy it; distress should be increasing from previous levels. With the preparation stage, the client develops intent to change and begins to take preliminary actions such as seeking therapy; distress should be at its most intense.

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A more in-depth exploration of the initial phase of counseling and psychotherapy may provide useful information and guidance for clinical researchers and practitioners. For example, how should demoralization and remoralization be assessed? In other words, what specific aspects of demoralization manifest early in therapy, such as psychological distress, and which observers are best able to report on these signs? Relatedly, what proportion of clients manifest signs related to demoralization? If the proportion is high, this implies that demoralization may be a major motivator for clients to seek therapy. Finally, for how many sessions do clients evidence signs of demoralization? Because failure to remoralize may be a potential contributor to premature termination, the answer to this question may indicate the time frame within which clinicians must work to intervene with demoralization issues. In this study we attempt to deepen knowledge of the processes involved in the initial phase of psychotherapy by exploring a large archival dataset containing multiple administrations of a measure partially developed on the basis of Howard et al.'s (1993) phase model. Using the Behavioral Health Questionnare-20 (BHQ; Kopta & Lowry, 2002), we investigated outpatients' self-reports of psychological symptoms and functioning during early sessions of psychotherapy, when the largest amount of change often appears (Sperry, Brill, Howard, & Grissom, 1996). More specifically, we examined clients' relative endorsement of BHQ items at the start of therapy as well as which items exhibited the largest change across early sessions.

Method

Procedure and Participants

Data collection was performed at college counseling center at a private Midwestern urban university with approximately 10,000 undergraduate, graduate, and professional students. After providing informed consent, all clients voluntarily completed a progress monitoring (PM) measure on the day of their initial intake appointment before they met with the therapist, and then completed follow-up PM forms prior to each subsequent session. In this brief therapy setting, clients completed the measure up to and including the 8th session; the process of data collection continued for 5 academic years. Thus, these data allow an in-depth exploration of the initial phase of psychotherapy. Center therapists were psychologists or post-doctoral psychology residents who primarily provided brief relational and problem-solving counseling. The mean number of sessions per client equaled 5.43 (median equaled 4, SD equaled 4.98, range equaled 1-36). Because of the significant effort required to clean up and prepare the archival data for analysis of repeated measurements, we sampled BHQ data from Sessions 1, 2, 3, and 6 so that the resulting dataset consisted of large samples for the first 3 sessions and an adequate sample size for a later comparison. As shown in Table 1, the completed number of PM measures ranged from 772 at Session 1 to 269 at Session 6; sample size varies slightly from these totals in subsequent analyses because of missing data. No information was available regarding the reasons (e.g., attrition, lack of compliance with completion of the measure) the sample size decreased by session. At Session 1, 68% of the clinical sample was female and 32% male; 90% were White and 3% were African-American. Sixty-four percent were 18 to 21 years of age, 78% were undergraduate students, and 20% were graduate students. Similar percentages were found at Session 6 for demographic variables.

Progress Monitoring Measure

Behavioral Health Questionnare-20 (BHQ). Kopta and Lowry (2002) created the BHQ as a self-report measure to assess general mental health. Item selection was based on content reflecting (a) common problems presented in outpatient psychotherapy, (b) Howard et al.'s (1993) phase model of psychotherapy, and (c) high levels of endorsement in a sample of 1,417 psychotherapy outpatients. Respondents rate items based on the previous 2 weeks, a common time period between psychotherapy sessions. The resulting 20-item measure produces a Total score (i.e., global mental health), Well-Being (emotional distress, life satisfaction), Psychological Symptoms (depression, anxiety, and drug/alcohol use), and Life Functioning (work/school performance, relationships) scales. Table 2 includes brief item content and the item number; higher scores indicate fewer problems or dysfunction. During scale development, Kopta and Lowry (2002) administered BHQ items to 4 adult samples: College students receiving counseling at a college counseling center (n = 208), adult outpatients receiving psychotherapy (n = 211), community adults not in psychotherapy (n = 380), and college students not in psychotherapy (n = 465). Participants were predominantly Caucasian (88%), female (72%), and on average were 20.1 years old. Coefficient alpha for the Total scale ranged from .89 to .90, while test-retest reliability, based on a 2-week retesting, was computed with the college student sample and equaled .80 for Total score. Table 1 displays coefficient alphas for this clinical sample in Sessions 1, 2, 3, and 6 that similarly range from .88 to .92.

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Kopta and Lowry (2002) also found high correlations between the BHQ Total score with similar scales such as the SCL-90-R (Derogatis, 1983) and Outcome Questionnaire (OQ-45; Lambert & Finch, 1999) that they interpreted as indicative of a unidimensional factor reflecting general mental health. While researchers typically employ test data at the level of aggregated subscales and total scores, they may also study item level data to examine change and associations in more fine-grained analyses. Research indicates that scores on single items evidence lower reliability and validity estimates than aggregated scales (e.g., Meier, 1984), but variance from single items must possess some amount of reliable and valid variance if these items contribute to an aggregated score. Consequently, in this study we examined both item and aggregated score data to study magnitude as well as change in the 20 domains assessed by BHQ items.

Results

Demographic influences. Statistical relations between BHQ item scores and Total Score with gender, age, and ethnicity were examined at Session 1. No statistically significant correlations were found between ethnicity and BHQ scores or between BHQ Total Score and age or gender. Women reported higher levels of distress, fear, eating problems, nervousness, and heart pounding, while men reported greater problems with alcohol and drugs (interfering with relationships and school), suicidal thoughts, and intimate relationships. Younger clients reported more problems with self-esteem, suicidal thoughts, sadness, and mood swings, but fewer problems with intimate relationships and friendships. Initial symptom/functioning levels. We examined the percentage of clients reporting moderate to high endorsements for each BHQ item at Session 1. As shown in Table 2, 86% of clients reported moderate to high scores on the distress item, the highest percentage for any item. Endorsement ratings greater than 70% at Session 1 included items assessing motivated (81%), life satisfaction (79%), concentration (72%), and life enjoyment (72%). Items with endorsement rates greater than 50% included feeling nervous (69%), intimate relationships (59%), friendships (59%), feeling sad (56%), not liking self (55%), fearful/scared (53%), and feeling hopeless (51%). Overall, psychological distress was the most significant concern for clients, items assessing general life issues were next in terms of percent endorsed, followed by items tapping into negative affect and social functioning. Change at BHQ Total Score and item level. To gain an overall sense of therapy effectiveness, we computed an Effect Size (ES) comparing available client data in Session 1 to Session 6. Table 1 includes means and standard deviations by session number for the BHQ Total Score. Subtracting the means of the BHQ Total Score from Session 1 to Session 6, and using the Session 1 standard deviation as the denominator, Effect Size (ES) equals .62 (59.92 - 52.77 / 11.59). This ES indicates that the average client in this sample improved slightly more than one-half of a standard deviation on the BHQ total score, similar to the average ES (.68) previously reported by Smith and Glass (1977) in their meta-analysis of psychotherapy outcomes.

Session Coefficient BHQ Total Distress Number п alpha M(SD)Mdn M(SD)772 .88 52.77 (11.59) 53 2.47 (0.94) 2 632 .90 57.46 (11.05) 58 3.01 (0.91) .91 3 514 58.79 (11.38) 60 3.17 (0.96) .92 269 59.92 (11.87) 62 6 3.09 (1.02)

Table 1: Descriptive Statistics for BHQ Total Score and Distress Item by Session

Note. The amount of change for the distress item between Session 1 and Session 2 was almost as large (ES = .57) as for the entire scale from Session 1 to Session 6 (ES = .62).

To examine the size of item change during initial sessions, we calculated ES for all 20 BHQ item scores for the 3 available comparison intervals (i.e., Sessions 1-2, 2-3, and 3-6). The resulting 60 ES values are listed in Table 2; the mean and standard deviation of these item ESs equaled .13 and .09. Thus, the *distress* item ES value of .57 was about 5 standard deviations greater than the mean of all BHQ item ESs. As a comparison, only 4 other ES values equaled or exceeded .25, all of which changed from Session 1 to Session 2: *Motivated* (.26), *feeling sad* (.26), *feeling hopeless* (.25), and *intimate relationships* (.26). Figure 1 also illustrates that most items evidence their largest change from Session 1 to Session 2.

Brief Content (Item order)	Session 1 M (SD)	Moderate / High Problems	ES Between Sessions		
,	, ,	g .	1-2	2-3	3-6
Distress (1)	2.47 (0.94)	86%	<u>.57</u>	.18	.08
Motivated (3)	2.72 (p.93)	81%	<u>.26</u>	.03	.09
Life satisfaction (2)	2.83 (0.87)	79%	.20	.09	.05
Concentration issues	1.72 (1.18)	72%	.22	.13	.11
Life enjoyment (20)	2.00 (1.00)	72%	.21	.12	.05
Feeling nervous (15)	1.80 (1.19)	69%	.23	.13	.17
Intimate relationships (18)	2.22 (1.09)	59%	<u>.26</u>	.02	.02
Friendships (19)	2.27 (1.00)	59%	.18	.09	.06
Feeling sad (11)	2.13 (1.28)	56%	<u>.26</u>	.10	.14
Not liking self (7)	2.25 (1.29)	55%	.18	.09	.14
Fearful, scared (4)	2.31 (1.17)	53%	.17	.15	.08
Feeling hopeless (12)	2.34 (.128)	51%	<u>.25</u>	.04	.15
Mood swings (13)	2.40 (1.26)	48%	.21	.10	.16
Work/school Issues (17)	2.48 (1.12)	47%	.12	.08	.07
Heart pounding (16)	2.62 (1.22)	43%	.24	.01	.18
Eating problem (9)	3.50 (1.01)	14%	.16	.11	.03
Suicidal (10)	3.61 (0.81)	10%	.19	.07	.02
Harm someone (6)	3.73 (0.71)	7%	.10	.05	.04
Drug use hinders	3.77 (0.71)	6%	.08	.10	.02
Relationships (14)					
Drug use hinders	3.77 (0.71)	5%	.07	.08	.06
School (5)					

Table 2: BHQ Item Descriptive Statistics for Session 1 and Effect Sizes Across Early Sessions

Note. Items are arranged in descending order by the percentage of moderate to high problems endorsed. The moderate to high problems column refers to the percentage of clients who indicated that they had moderate to high difficulties on that item domain at Session 1. Lower mean scores indicate more dysfunction or problems; negatively worded items were reversed scored. The BHQ's 5-point response format presented different labels depending upon the item domain. Scores on items 1 – 3 ranged from 1 to 5, and on items 4 – 20 the range was 0 to 4. Effect sizes that equal or exceed .25 are underlined. Order refers to the order of the item in the BHQ.

A partial explanation for the lack of change on some BHQ items is the presence of a ceiling effect. Defining a ceiling effect as occurring when the item mean plus the item standard deviation is greater than the highest possible value of the item (Meier, McDougal, & Bardos, 2008), ceiling effects at Session 1 (see Table 2) were present for BHQ items assessing alcohol/drugs interfering with school work (item 5), wanting to harm someone (6), eating problems (9), suicidal thoughts (10), and alcohol/drugs interfering with relationships (14). Roughly one-quarter of all items evidenced a ceiling effect, indicating that little improvement in these domains would be evident even if therapy were effective. Predicting future BHQ Distress and Total Scores. We also explored whether initial distress scores could predict subsequent distress scores as well as BHQ Total scores. Session 1 distress scores were employed to calculate improvement probabilities for clients' subsequent distress scores (IPs; Meier, 2014). This statistic estimates the likelihood that a client will either improve, stay the same, or worsen from an initial PM measurement to a second PM measurement over the course of a specific period of psychotherapy. Table 3 display the likelihood that a client with a particular Distress score at Session 1 will have a particular Distress score at Session 3. As shown in Table 3, the probability that a client who began Session 1 at the highest Distress score (5), for example, would improve at Session 3 equaled 80%. That is, highly distressed individuals with a Distress score of 1, at Session 1, evidenced Distress scores of 2 (34%), 3 (19%), 4 (24%) and 5 (3%) at Session 3. Similarly, clients initially at Distress score 4 evidenced at Session 3 a 97% likelihood of improvement and at Distress score 3 a 49% chance of improvement. The largest improvement typically came in the form of a 1-point change over the 3 sessions. Clients least likely to show an improvement in Distress began at score 4 (47%), indicating moderate to little initial distress; inspection of the probabilities in Table 3 indicates that very few clients reported a worsening of distress over time. Overall, initial Distress level appears moderately predictive of subsequent Distress level (r = .32, p < .001, between Session 1 and 3 scores).

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Distress		<u>Distress</u>	Session	3	
Session 1	1	2	3	4	5
1 (High)	.19 (.11)	.34 (20)	. 19 (11)	.24 (14)	.03 (2)
2	.03 (5)	.22 (31)	. 42 (61)	.28 (40)	. 05 (7)
3	.02 (2)	.16 (19)	.34 (40)	.44 (51)	. 05 (5)
4	.03 (1)	.13 (5)	.21 (8)	.47 (18)	. 16 (6)
5 (Low)	.25 (2)	.38 (3)	.38 (3)		

Table 3: Distress Session 1 Improvement Probabilities for Distress Scores at Session 3

Note. Probabilities in bold indicate improvement over time, while all others stayed the same or worsened. Sample sizes are in parentheses and blank cells have no data. Because of reverse scoring, low distress scores indicate more distress; rounding errors mean row sums may not equal 100.

To increase statistical power in the prediction of BHQ Total Scores, we created a categorical variable based on Session 1 distress scores. This distress variable had 3 values corresponding to *distress* item scores for responses 1 and 2 (indicating higher distress), response 3 (moderate distress), and responses 4 and 5 (lower distress). We computed one-way ANOVAs for Sessions 2, 3, and 6 using the distress categorical variable as the independent variable and an adjusted BHQ Total score (minus the *distress* item score) as the dependent variable. The overall F was statistically significant for Session 2 (F [2, 485] = 51.61, P < .001), 3 (F [2, 377] = 22.15, P < .001), and 6 (F [2, 183] = 3.84, P < .05). Using the Tukey HSD test, we performed pairwise comparisons among the means for all sessions (see Table 4). At Sessions 2 and 3, all means were statistically different from each other; at Session 6, only the high and low BHQ means differed. As shown in Table 4, means for BHQ Total Scores were essentially unchanged across Sessions 2, 3, and 6 for the group of clients who reported low to moderate distress at Session 1. For clients who reported high distress at Session 1, however, their means evidenced steady improvement from Session 2 to Session 6.

Distress Session 1 <u>At</u> Session Low Moderate High n 67.25 (9.80) 449 60.20 (9.03) 51.14 (9.88) 365 66.85 (8.92) 61.32 (9.86) 53.32 (10.69) 3 185 67.37 (12.68) 61.93 (10.81) 56.26 (11.57) 6

Table 4: Session BHQ Total Score Means By Initial Distress Scores

Note. In contrast to clients with initial low to moderate distress, steady improvement is evident from Session 2 to Session 6 in the group of clients who reported high distress at Session 1. The sample size per session reflects individuals who provided complete BHQ data at Session 1 and at a particular session (i.e., 2, 3, or 6).

Discussion

This study employed a large clinical sample to examine the level and amount of change in outpatients' psychological symptoms and functioning during the initial phase of psychotherapy. Distress was the most highly endorsed item on the BHQ at the first session, and rapid change in distress far exceeded the amount of change on other BHQ items. Change for the distress item between Session 1 and Session 2 was almost as large (ES = .57; 3.01 - 2.47 / 0.94) as for the entire scale (ES = .62) over the first 6 sessions (see Table 1). In contrast to distress results, other items assessing negative affect (e.g., hopeless, fear, sadness, sadness, and nervousness) were neither as highly endorsed at Sesssion 1 nor did they evidence large amounts of early change. In this study, distress exhibits 3 key elements that have important implications for theoretical descriptions of the remoralization phase of psychotherapy. While demoralization and hopelessness imply a lack of energy and motivation for coping with life problems, these distress data suggest considerable *motivation* for clients seeking help to alleviate psychological pain (Clarkin & Levy, 2004; Elhali, Voorhees, Ford, Min, & Frueh, 2009). That is, clients entering therapy in this study reported high levels of distress. In addition, distress in the remoralization phase also appears to be *acute* in nature. Distress decreases rapidly during the first few sessions, generally in the direction of less distress. Few clients who initially reported little distress evidenced greater distress over subsequent sessions.

Finally, *gender differences* were apparent: Distress in women appears to be adequately assessed via self-report, but males in this study reported less distress at Session 1 than did females. Although no *a priori* reason exists to believe men experience less distress than women, research suggests that men's stereotypic sex roles may lead them to avoid the expression of certain types of negative affect, such as shame, fear, and sadness (Brody & Hall, 2008). Research supports the idea that women report more negative affect, including sadness and depression (Brody & Hall, 2008), raising doubts about the ability of self-report to obtain valid distress ratings from men during the initial phase. These results may have implications for the important clinical problems of premature termination and dropout. Research estimates of dropout rates range from 35% and higher, depending upon the clinical problem, population, and setting (Clarkin & Levy, 2004; Roos & Werbart, 2013). Given that clients who prematurely end therapy tend to do so after one or a few sessions (Barrett, Chua, Crits-Christoph, Gibbons, & Thompson, 2008), it is possible that clients drop out early either because their distress (a) quickly becomes too low to sustain their motivation to seek help, or (b) fails to decrease, remaining at a painfully high level. Regarding the former, clients whose distress provided a major source of motivation to seek help may find that distress reduction also diminishes their motivation to continue the often difficult work of psychotherapy.

The resulting small dose of therapy, however, may be insufficient to help clients with problems that require more sessions for other types of change to occur (Barrett et al., 2008; Bohart & Wade, 2013; Hansen, Lambert, & Forman, 2002). On the other hand, clients with high distress who fail to experience an early decrease in distress may also terminate prematurely. Yu (2012), for example, found that depressed clients with high levels of symptom distress were more likely to drop out. Although a major benefit of archival datasets is that they allow a preliminary examination of phenomena of interest via a large sample size, this approach also permits potentially uncontrolled variables to influence results. Consequently, future research should focus on replication of the distress results with other measurement methods, clinical populations, and therapy settings. While the measurement of distress was accomplished with a single self-report item, future research should replicate these findings with a multi-item scale. If future research replicates the finding of a gender difference in self-reported distress, it may be important for a clinician or another source to assess distress in male clients to obtain valid data. Greater specification of distress's early effects in therapy could also help in the development of additional assessment and intervention approaches. Progress monitoring measures that includes assessment of and feedback regarding distress levels, for example, may provide clinicians and supervisors with an earlier opportunity to alter therapeutic strategies around client distress and subsequently decrease treatment failure and client dropout (cf. Lambert, 2012).

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