Intuition: The BYU Undergraduate Journal of Psychology

Volume 6 | Issue 1 Article 6

2010

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Intuition 2010
Vol 6, 30-36

The Long-term Effects of Short-term Psychotherapy on Depression: A Review of the Literature

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ABSTRACT *As depression is one of the most prevalent challenges to mental health today, there is a need for still further research in this subject that has already received so much attention. There is a particular need for longitudinal studies of depression to determine the efficacy of psychotherapy as treatment. Additionally, there is a promising possibility for research into brief periods of treatment. Some of the psychotherapy literature focusing on the overlap of these two fields is examined. While many studies indicate that therapy brings about a decrease in depression symptoms, which is then maintained for as long as two years, there is another segment of the literature which emphasizes the likelihood of relapse over a longer time span. The limitations of these studies are examined. Of special interest is the most recent literature, indicating that therapy as brief as a single day can bring about a long-lasting decrease in symptoms.*

Debilitating and destructive, psychological depression is one of the most common mental health concerns today (Murray & Lopez, 1996). As such, it is also one of the most commonly studied. Anecdotally, a recent search for "depression" as a major subject heading in the psycINFO database for sources published within the last ten years yielded 34,492 results- more than "schizophrenia" (22,153), "anxiety" (16,725), "eating disorders" (4,801), and "Freud" (2,431). Clearly, depression and its treatment is a thriving source of research in psychology. One of the most interesting areas of study which has yet to be fully examined is the interaction between a short period of psychotherapy treatment for depression and a long-term follow-up period. Within this investigation, we will discuss several specific methods and applications of depression treatment research which warrant further investigation.

While antidepressant pharmaceuticals are the most common form of treatment for depression, there is currently significant controversy over their usefulness in effecting a meaningful change in depressive symptoms. As one researcher stated, "Outcomes for individuals taking antidepressants appear poor on the whole" (Hughes & Cohen, 2009, p. 17). With this doubt in psychopharmaceuticals, psychotherapy is one of the principal remaining alternatives for the treatment of depression. This status creates the need for additional research into the effectiveness of these traditional "talk" therapies; this review aims to contribute to that examination.

While the general study of depression is important and much needed, there is a specific advantage to longitudinal studies of those treated by psychotherapy. Although there is extensive literature on the treatment of depression, the disorder has a long-term rate of relapse as high as 80% (Judd, 1997), creating a need for the study of depression long after treatment has ended. While an individual may feel that he or she has been 'cured' of depression after a given amount of therapy, there is a probable chance of further depressive episodes. Because of this possibility of future relapse, the results of any study of depression can be generalized only as far as the period of that study's follow-up data. By tracking depression assessment data across time, it is possible to measure what might be called the true effectiveness of a given therapy, rather than only the reduction of depressive symptoms while the patient is currently receiving counseling. Thus, there is an important place for long-term studies of depression treatment outcomes in the scholarly research.

In addition to studying the longevity of conventional therapy, there is a potentially rewarding area of current research into the effectiveness of specifically short-term therapy. From a research standpoint, limiting psychotherapy to fewer sessions allows a researcher to more easily study the effects of a given methodology while limiting the possible confounding factors which come into play in any long-term treatment. Short-term therapy may also be seen as desirable by those seeking it, allowing them less time away from everyday life and the possibility of rapid relief from symptoms. Some of the

potential benefits of short-term treatment, as studied in longitudinal research, will be examined in this review of the literature.

While psychotherapy has considerable promise as a treatment for depression for the reasons given above, therapy also has numerous drawbacks. Depending upon the specific therapeutic ideology and mental health care provider, psychotherapy can be both time consuming and, unless obtained from a free clinic, quite expensive; this may mean that therapy is available only to those who can afford the cost and time away from work. Additionally, there is a strong public tendency to avoid seeking out mental health care (Collins, Westra, Dozois & Burns, 2004); therefore, those who participate in studies which recruit through existing counseling centers may not be representative of the population as a whole. This limitation in the generalizability of many depression studies indicates that results must be viewed with caution.

Despite the abundance of studies on depression, there are still significant doubts that draw into question the usefulness of their methodologies for the body of psychological research. Longitudinal studies involving therapy, for instance, have attrition rates as high as 45% (Brown, Elliott, Boardman, Andiappan, Landau, & Howay, 2008). While some of this can be explained by the difficulties of tracking participants over a year or longer, this attrition rate introduces possible confounding factors for any results reached. For example, it is possible that a given subset of the participants, such as the extremely depressed, might be less willing than other groups to continue in a study for a long period of time. Uncertainties such as this raise questions about the legitimacy of these studies' findings. The most significant unanswered question about depression research is that of psychotherapy's long-term effectiveness. Some studies indicate that the gains made in therapy are kept as long as two years (Brown et al., 2008; Cross, Sheehan, & Khan, 1982; Gilboa-Schechtman & Shahar, 2005). While this demonstrates a certain effectiveness of psychotherapy, additional research suggests that relapse into a serious depressive episode commonly occurs after this two year period. (Kennedy, Abbott, & Paykel, 2003; Yiend, Paykel, Merritt, Lester, Doll, & Burns, 2009). Clearly, fundamental difficulties such as these must be understood in order to draw any meaningful conclusions about the efficacy of psychotherapy as a treatment option for depression.

To attempt a reconciliation of these various and conflicting studies on the effectiveness of depression treatment, several overlapping areas of research must be studied. In this review, we will look at the combination of two such areas- the application of short-term psychotherapy to depression, and the long-term effects of this treatment.

In order to get an in-depth look at the advantages and issues involved in the combination of short-term treatment and long-term follow up, Cross, Sheehan, and Khan's pioneering 1982 study can be used as a base from which to examine the body of literature as a whole. We will see that there are serious limitations and challenges facing the scientist intent on performing any longitudinal study, especially one assessing psychological change. Following Luborsky, Singer, and Luborsky's (1975) conclusion that long-term data from studies of insight-oriented therapy was "either absent or too brief to catch the long-term benefits" (p. 1,005), Cross et al. set out to empirically measure the effects of two different methods of therapy on depression. While they were not the first to raise the issue of the importance of long-term data on the effectiveness of psychotherapy, their study was one of the first to provide that data. In the study, the severity of participants' depression was rated using various assessment tools before therapy, immediately after their twelve weekly sessions of therapy, four months after the conclusion of therapy, and one year after the conclusion of therapy. Participants were treated in an existing city clinic, using independent therapists. While the study was initially performed to compare the differences in efficacy between behavioral and insight therapy, Cross et al.'s findings are most notable for our purposes in that they demonstrate that a period of therapy of only three months can bring about a significant change in symptoms, and that those gains made in therapy are kept, with largely no degradation, over a period of twelve months. We will now examine these first findings in light of later studies of depression which also involve a brief period of therapy (for our purposes, no longer than four months) and a long term follow up period (at least one year).

There is significant support for Cross et al.'s principle claim that the gains made in therapy are not lost over time. In Gilboa-Schechtman and Shahar's (2006) study, we see these same results with an added area of emphasis. After 12-15 sessions of Cognitive Behavioral Therapy (CBT), conducted across four months, the participants'

mean score on the Beck Depression Inventory (BDI) was reduced from 27.71 to 7.85, with a higher score indicating greater severity of symptoms. While this is encouraging by itself, what is most interesting is that their follow-up analyses at 12 and 18 months after the completion of therapy show that there was essentially no increase in BDI score. This indicates that the state of the participants' depression was much the same a year and a half after treatment as the day they walked out of their last session. This finding is echoed in various other literature. Fleming & Thornton (1980) demonstrated this same efficacy of treatment in a group setting, although over a much shorter time span; others show nearly identical reductions in depressive symptoms over one year (Ward et al., 2000), two year (Brown et al., 2008), and three year periods (Corney & Simpson, 2005). The fact that these studies have achieved such similar results while taking place across a wide spread of time adds support to Kennedy et al.'s (2003) statement that "the long-term outcome of depression... does not appear to have changed in the last 20 years" (p. 827). Like Cross et al.'s work, these studies demonstrate that the decreases in depression symptom severity brought on by psychotherapy are kept over time, with very little degradation.

One of the most intriguing findings across many of these studies is that the specific methodology used in psychotherapy had no influence on the efficacy of treatment. While numerous studies (Brown et al., 2008; Cross, Sheehan, & Khan, 1982; Gilboa-Schechtman & Shahar, 2005) demonstrate that there are significant effects of psychotherapy which can last as long as two to three years, it was found that those changes were not dependent on the specific method of therapy used. Across all of the studies examined, CBT, general practitioner care, non-directive counseling, insight therapy, and specific Banduran methods of therapy were all measured against at least one other method, and no study found any method to be significantly more effective than another (Cross et al., 1982; Fleming & Thornton, 1980; Ward et al., 2000). What is most intriguing about these findings is that those suffering from depression who saw their general practitioner made the same reductions in depressive symptoms as those treated by a trained psychotherapist. This is in opposition to Brown et al.'s (2008) finding that those who had sought out general practitioner care before attending a CBT workshop were no better off than those who had not. These findings may suggest that different subsections of the depressed population are helped by different methodologies. More research is required, however, to determine if this is the case and, if so, which methodologies are most effective for each population.

Other important factors on the effectiveness of therapy are the conditions at the beginning of a period of treatment. (Gilboa-Schechtman & Shahar, 2005).Gilboa-Schechtman and Shahar found that those who made the quickest gains at the start of psychotherapy treatment were also those who kept those gains over time. This may allow clinicians to gauge the worth of a method of therapy very quickly for each client, before a great deal of time is invested in a treatment that will not be effective. This finding highlights an important inconsistency in the research, however. While Gilboa-Schechtman and Shahar found that the speed of uptake in psychotherapy was an important predictor of long-term symptom reduction, others have found that "greater severity of illness was the most consistent predictor of poor outcome" (Kennedy et al., 2003, p. 827). In contrast to both of these studies, another has found that "quality of interpersonal relationships is the best pretreatment predictor of long-term changes" (Hoglend, 2003, p. 271). While each of these findings reflect a specific ideology and may not be in direct opposition to one another, there is a clear need for a definitive study of the different predictors of later success in treatment.

While the studies examined so far show very promising results of the longevity of treatment effects up to three years, there are other areas of research indicating that depression is still a significant threat to wellbeing at this stage. There are longitudinal studies gathering data for as long as 23 years which conclude that periods of serious relapse are extremely likely (Dunner et al., 2007; Kennedy et al., 2003; Yiend et al., 2009). The principal finding of studies with follow-up periods longer than two years is that the rate of relapse among those who recover from their depression is very high: 64% (Yiend et al., 2009) and 67% (Kennedy et al., 2003) in two methodologically sound studies. As Kennedy et al.'s analysis states, "the vast majority of those who have had an episode of severe depression will ultimately suffer a recurrence" (p. 835). Kennedy et al. found that the average time to a recurrence of depression was 2.5 years, just longer than the follow-up period for many of the studies examined previously. Twenty-five percent of those tracked relapsed within 12 months. As Yiend et al. summarize, "the course of primary care depression appears worse than suggested by

previous, shorter follow ups. Our data suggest that long term risk of a recurrence may be high, but with recurrence delayed" (p. 79).

While the findings of the Dunner et al, Kennedy et al., and Yiend et al. studies are relevant to an interest in the long-term effects of psychotherapy on depression, it is important to note that their populations and methodologies are quite different from the studies previously discussed. These three studies were not explicitly short-term in their period of treatment, differing significantly from the short-term treatment studies. Also, the Dunner et al, Kennedy et al., and Yiend et al. studies involved groups of the chronically and severely depressed, which may be subgroups too specific to generalize out to the population of depressed persons as a whole. If the populations involved were the same as studies involving short-term periods of treatment, it seems that certain conclusions of these studies would have been detected in the body of work first examined. For example, the average treatment time to recovery was 10.3 months (Yiend et al., 2009), and relapse was found to be most likely within six months of recovery (Dunner et al., 2007); these findings stand in direct opposition to studies of short-term treatment, indicating that different populations were being studied. The greatest difference in these long-term treatment studies is that psychopharmaceutical antidepressants were used by a subset of the research participants; these medications function completely differently from psychotherapy as a treatment for depression. Despite these dissimilarities to research involving short-term treatment, the results of these long-term treatment studies are useful in understanding the longitudinal outlook for the sufferer of depression, even if the two groups may not be directly comparable.

While the results of the studies examined thus far demonstrate compelling conclusions, there are significant difficulties with conducting any longitudinal study of depression that must be taken into account when interpreting the research. One of the most important to address is the possibility of confounding effects or hidden variables in the data. Perhaps the prime demonstrators of the effects of therapy are the differences in pre- and post- treatment scores on measures of depression, such as the frequently used BDI. However, the worth of these data must be paired with the samples from which they are drawn, and those sample sizes are often quite limited. The sample sizes in the studies discussed range from 181 (Corney & Simpson, 2005) to 30 (Cross et al., 1982). These low sample sizes make detailed analyses difficult, and may mask meaningful conclusions which might otherwise be made. Additionally, logistical constraints force most studies to track participants only once every 4-12 months. This often yields only 3-5 data points for any measure used. With assessments of progress so infrequently done, virtually all research reviewed was unable to track short-term or dynamic changes in depression. Overall, longitudinal studies are severely limited in generalizability by the small amount of data generated from their samples.

One of the prime contributing factors to this low sample size is also the source of the most troublesome confounding factor in longitudinal depression research. Nearly every study began with a substantially higher subject size, but after tracking participants over time, there was a very high degree of drop out, many as high as 45% (Brown et al., 2008). While this is unfortunate because of the difficulties in calculating statistics which participant drop out entails, it also indicates a more troubling possibility. Because the cause of participant attrition is not completely known, it leaves room for numerous factors which could cause alternate explanations for any conclusion drawn. While some researchers create statistics including presumed data from previous participants (none of these studies were used in this literature review), the characteristics of those who drop out of studies are not known. Brown et al.'s (2008) data indicate that those with the highest BDI scores at three months after treatment later dropped out, while those with the lowest BDI scores at twelve months later did so. While it may be that the severely depressed are more likely to end participation in studies, it could also be that those who become so healthy that they no longer think of themselves as depressed end participation. Essentially, the characteristics of those who opt out of studies or cannot be found for follow-up are not known, so no conclusions can be drawn about these missing data.

The limitations of the short-term treatment of depression and longitudinal follow-up are significant, and must be taken into consideration. These problems, paired with the inexperience of the therapists used in psychotherapy research, prompted the psychiatrist Irvin Yalom (2002) to state that "it is not hard to understand why such research has, at best, a most tenuous connection with reality" (p. 33). Despite these imperfections in the research, however, there is still much to be gained through an examination of their results. When considering research, each of the areas studied show promise in new

methods for application in the treatment of depression, as well as in creating interest in new areas of investigation. Here, we will examine the combination of two such areas, including some of the most up-to-date research available- the long-term effects of short-term therapy on depression.

Brown et al.'s 2008 paper holds an interesting position in the psychological literature because it demonstrates the extreme in brevity of treatment, limiting it to just a single day of group cognitive-behavioral techniques, while tracking participants across a two year period, and showing promising results. To understand how this study is an enmeshment of the two separate factors we have previously discussed, we will examine the authors' methods. As previously stated, Brown and her colleagues held but a single day of cognitive behavioral therapy, which they labeled a "self confidence workshop." The label was chosen to avoid the stigma held by many people against seeking out professional help for mental health problems. Previous research had shown that when workshops or group therapy sessions were truly labeled as treatment for depression, attendance was low, and the majority of those present had previously sought out mental health care (Watkins et al., 2000). This change in phrasing was made to get a more representative sample of the population. The extreme briefness of the treatment also facilitated its image as a more culturally acceptable option by potential participants. More importantly, however, it facilitates an examination of the advantages and challenges of very brief psychotherapy in their most distilled form.

What differentiates Brown and her co-author's (2008) study from others that focus on very brief periods of therapy is their extensive follow-up. Measurements of depression were gathered from each participant before the workshop, and then at 3, 12, and 24 months following. There are two very striking aspects of these data. First, there were statistically significant reductions in depression, as measured by the BDI, as well as other measures, with only a single day of CBT techniques. Among those designated as "depressed," the mean initial BDI score was 24.34. Three months after the workshop, the mean BDI was reduced to 15.31. This is quite encouraging, as it adds support to the worth of these single-day workshops as tools to lessen the pain of depression. More striking still, however, is that after 24 months, the mean BDI score for that same depressed group was 15.77, virtually the same result from 21 months earlier. A prominent advantage of Brown et al.'s methodology is their application of psychotherapeutic techniques to a large group simultaneously, creating a cost-effective method of treatment for one of the most common threats to public health. While the data is quite recent and therefore unverified by repeated testing, initial analyses are encouraging, and at the very least demonstrate that further research is required to validate this potentially effective and far-reaching method of depression treatment. This study echoes the work of earlier researchers (Brown et al., 2008; Cross, Sheehan, & Khan, 1982; Gilboa-Schechtman & Shahar, 2005) on the efficacy of psychotherapy when treating depression, while expanding it into new areas and applications. If further research supports the assertion that extremely brief periods of treatment administered in a large group setting can affect an enduring reduction in depressive symptoms, there are far-reaching public-health and research possibilities.

Through an examination of a selection of the depression literature, it has been seen that a brief period of psychotherapy can bring about a significant reduction in depressive symptoms. These impacts appear to be consistent for as long as three years with almost no degradation of treatment outcomes, although a segment of the research casts into question its effect thereafter. This benefit from therapy appears to occur regardless of the specific ideology behind the psychotherapy. While studies which track participants for as long as 20 years demonstrate the longevity and probability of relapse with depression, this research involves populations and methodologies significantly different from those in studies focusing on treatment methods; these limitations prevent very long-term studies from invalidating findings that support the efficacy of psychotherapy as treatment. While longitudinal research of depression treatment is informative, it also includes many inherent difficulties, such as low sample sizes and a high rate of participant attrition. Of special interest in the research are results which indicate that treatment as brief as a single day can cause a lasting reduction in depression. While all of these studies have notable limitations, the research indicates that psychotherapy is a valid method for the treatment of depression. Although all elements of the long-term effects of short-term treatment are not known, there is strong support to suggest that psychotherapy can significantly reduce depressive symptoms, and those gains can be retained for at least two years.

Although this review has attempted to summarize and synthesize research from several areas of study, it is important to state that the field of depression research, and even the realm of specifically short-term psychotherapy treatment, is much too large to be accurately contained within the findings of this literature review. While it is the hope of the author that the findings herein might be useful in highlighting areas of interest in the literature and to further future research, the relatively narrow scope of this study must be taken into account as well.

Despite the promising findings in many of the studies examined, there are still many areas which call for further investigation. Studies have found numerous predictors of cure to be the most useful, without reaching any consensus. If there is no single best predictor of psychotherapy outcome, who is best helped through therapy, and who is not? Do the differences in the psychotherapy ideology used truly have no effect, or are the different methodologies helping separate groups of participants? Most importantly, the true long-term effect of short-term therapy has yet to be decisively concluded. In order to do this, very well controlled studies with follow-up periods over five years and minimal participant drop-out are needed. These studies have shown that there is the real possibility for change in psychotherapy; we must now discover how to make that change as permanent as possible.

References

Brown, J. S. L., Elliott, S. A., Boardman, J., Andiappan, M., Landau, S., & Howay, E. (2008). Can the effects of a 1-day CBT psychoeducational workshop on self-confidence be maintained after 2 years? A naturalistic study. *Depression and Anxiety, 25*(7), 632-640. doi:10.1002/da.20365

Collins, K. A., Westra, H. A., Dozois, D. J. A., & Burns, D. D. (2004). Gaps in accessing treatment for anxiety and depression: Challenges for the delivery of care. *Clinical Psychology Review, 24*(5), 583-616. doi:10.1016/j.cpr.2004.06.001

Corney, R., & Simpson, S. (2005). Thirty-six month outcome data from a trial of counselling with chronically depressed patients in a general practice setting. *Psychology and Psychotherapy: Theory, Research and Practice, 78*(1), 127-138. doi:10.1348/147608304X21365

Cross, D. G., Sheehan, P. W., & Khan, J. A. (1982). Short- and long-term follow-up of clients receiving insight-oriented therapy and behavior therapy. *Journal of Consulting and Clinical Psychology, 50*(1), 103-112. doi:10.1037/0022-006X.50.1.103

Dunner, D. L., Blier, P., Keller, M. B., Pollack, M. H., Thase, M. E., & Zajecka, J. M. (2007). Preventing recurrent depression: Long-term treatment for major depressive disorder. *Journal of Clinical Psychiatry, 68*(4), 619-630.

Fleming, B. M., & Thornton, D. W. (1980). Coping skills training as a component in the short-term treatment of depression. *Journal of Consulting and Clinical Psychology, 48*(5), 652-654. doi:10.1037/0022-006X.48.5.652

Gilboa-Schechtman, E., & Shahar, G. (2006). The sooner, the better: Temporal patterns in brief treatment of depression and their role in long-term outcome. *Psychotherapy Research, 16*(3), 374-384. doi:10.1080/10503300500485425

Hoglend, P. (2003). Long-term effects of brief dynamic psychotherapy. *Psychotherapy Research, 13*(3), 271-292. doi:10.1093/ptr/kpg031

Hughes, S., & Cohen, D. (2009). A systematic review of long-term studies of drug treated and non-drug treated depression. *Journal of Affective Disorders, 118*(1), 9-18. doi:10.1016/j.jad.2009.01.027

Judd, L. L. (1997). The clinical course of unipolar major depressive disorders. *Archives of General Psychiatry, 54*(11), 989-991.

Kennedy, N., Abbott, R., & Paykel, E. S. (2003). Remission and recurrence of depression in the maintenance era: Long-term outcome in a cambridge cohort. *Psychological Medicine, 33*(5), 827-838. doi:10.1017/S003329170300744X

Luborsky, L., Singer, B., & Luborsky, L. (1975). Comparative studies of psychotherapies: Is it true that 'everyone has won and all must have prizes'? *Archives of General Psychiatry, 32*(8), 995-1008.

Murray, C. J. L., & Lopez, A. D. (1996). Evidence-based health policy---lessons from the global burden of disease study. *Science, 274*(5288), 740-743. doi:10.1126/science.274.5288.740

Ward, E., King, M., Lloyd, M., Bower, P., Sibbald, B., Farrelly, S., Gabbay, M., Tarrier, N., & Addington-Hall, J. (2000). Randomised controlled trial of non-directive counselling, cognitive-behaviour therapy, and usual general practitioner care for patients with depression. I: Clinical effectiveness. *BMJ: British Medical Journal, 321*(7273), 1383-1388. doi:10.1136/bmj.321.7273.1383

Watkins, E., Elliott, S., Stanhope, N., Button, J., Williams, R., & Brown, J. (2000). Meeting the needs for psychological treatment of people with common mental disorders: An exploratory study. *Journal of Mental Health, 9*(4), 445-456.

Yalom, Irvin. (2002). *The Gift of therapy.* New York, NY: Harpercollins.

Yiend, J., Paykel, E., Merritt, R., Lester, K., Doll, H., & Burns, T. (2009). Long term outcome of primary care depression. *Journal of Affective Disorders, 118*(1), 79-86. doi:10.1016/j.jad.2009.01.026