



Behavioral Activation as an Empirically Supported Treatment for Depression

Hannah Wright and Claude Palaganas



INTRODUCTION

Depression is an issue with significant economic, societal, and personal implications. To demonstrate this fact, its economic burden in the U.S. was estimated at \$83.1 billion in 2000 (Greenberg et al., 2003, as cited in Richards, 2011). It has been more than two decades since the criteria for empirically supported treatments (ESTs) for mental health issues were established. In light of improving research methods, the current criteria has been criticized and changes to it were proposed. **Through literature review, this poster explores the current and proposed new criteria for ESTs. In particular, this poster aims to reevaluate Behavioral Activation (BA), a “well-established” EST for depression, using the proposed new standards to determine whether it still has strong empirical support.**

CRITERIA FOR ESTs

(Chambless & Hollon, 1998, as cited in Tolin et al., 2015)

Over 20 years ago, the criteria for ESTs were published, which led to significant positive changes that emphasized empiricism, improving both the quality and the quantity of treatment outcome studies (Tolin et al., 2015).

- **Well-established:** must be supported by “at least two independently conducted, well-designed studies” or “a large series of well-designed and carefully controlled single-case design experiments.”
- **Probably efficacious:** must be supported by “at least one well-designed study or a small series of single-case design experiments.”

BEHAVIORAL ACTIVATION (BA)

- An EST for depression that seeks to “activate” behaviors that contact positive reinforcement using a variety of techniques.
- Kanter et al. (2010) catalogued the following BA techniques by identifying those present in a significant number of trials reviewed:
 - Activity monitoring
 - Activity scheduling
 - Assessment of life goals and values
 - Skills training
 - Contingency management
 - Procedures targeting verbal behavior
 - Procedures targeting avoidance

"Very strong recommendation" criteria	Remarks
<ul style="list-style-type: none">• There is high-quality evidence that the treatment produces a clinically meaningful effect on symptoms of the disorder being treated.	<ul style="list-style-type: none">• BA typically had either a moderate or large positive effect on patients relative to control groups (Ekers et al., 2007; Mazzucchelli et al., 2009; Mazzucchelli et al., 2010). <p>At posttest, all favoring BA:</p> <ul style="list-style-type: none">— A moderate pooled ES (Hedge's <i>g</i>) of 0.52 (Mazzucchelli et al., 2010).— A large pooled ES (Hedge's <i>g</i>) of 0.78 (Mazzucchelli et al., 2009).— A large pooled ES (SMD) of 0.70 (Ekers et al., 2007).
<ul style="list-style-type: none">• There is high-quality evidence that the treatment produces a clinically meaningful effect on functional outcomes.	<ul style="list-style-type: none">• Functional outcomes were not explicitly measured in any of the reviewed RCTs.
<ul style="list-style-type: none">• There is high-quality evidence that the treatment produces a clinically meaningful effect on symptoms and/or functional outcomes at least 3 months after treatment discontinuation.	<ul style="list-style-type: none">• Follow-up period range: 1 week to 2.25 years (Ekers et al., 2007; Mazzucchelli et al., 2009; Mazzucchelli et al., 2010).— <u>2.25-year follow-up</u>: only the BA treatment group maintained clinically meaningful improvements with 64% of the BA patients falling within one SD of the nondepressed group (McLean & Hakstian, 1990).— <u>1-year follow up</u>: the BA group maintained improvements more effectively than other groups with a moderate effect size (Hedge's <i>g</i>) of 0.66 favoring BA when compared to the brief relational/insight therapy (control) group (Gallagher & Thompson, 1982).
<ul style="list-style-type: none">• At least one well-conducted study has demonstrated effectiveness in nonresearch settings	<ul style="list-style-type: none">• In the two effectiveness studies that were reviewed, both demonstrated effectiveness in nonresearch settings. However, both had significant limitations:<ul style="list-style-type: none">— Extremely small sample size, large standard deviations in instrument scores, nondiverse population (Kanter et al., 2015).— CT was included, forming a cognitive behavioral treatment package (Puig & Encinas, 2012).

Table 1. Modified GRADE recommendations for psychological treatments based on systematic review s (adapted from Guyatt et al., 2008, as cited in Tolin et al., 2015)

RESULTS

- Only two *very strong recommendation* criteria were met: the short-term and long-term clinically meaningful effect on symptoms (efficacy).
- In the majority of the studies, BA has demonstrated either a moderate or large effect (significant improvement in symptoms), with only a minority indicating a null effect.
- Compared to other treatments, BA performed just as well, if not better, especially in long-term follow-ups.
- A heavy focus was placed on symptom reduction, as measured by quantitative instruments such as the HRSD and the BDI.
- Measurements and analyses of functional improvement were severely lacking; thus, any statements about its clinical significance cannot be made.
- Inadequate attention was given to long-term outcomes with a significant percentage only measuring posttreatment results.
- There was an indication of effectiveness in non-research settings, but these effectiveness studies had significant limitations.

CONCLUSIONS

While BA is a “well-established” EST for depression (current standards) and has a plethora studies supporting its short-term and long-term efficacy, the proposed standards point to a few key areas of inadequacy. **Using the modified GRADE recommendation of *very strong, strong, or weak*, it fails to pass the criteria for *very strong recommendation*, but we do not believe it warrants a *weak recommendation*. Thus, we believe it should be given a *strong recommendation*.** However, this recommendation reflects the current state of literature and is subject to change. In line with Tolin and colleagues’ (2015) recommendations, future studies can be improved in the following ways:

- Measuring functional outcomes
- Demonstrating effectiveness in non-research settings
- Addressing generalizability, especially with minority groups
- Measuring long-term efficacy
- Quantifying treatment strength using effect sizes

ACKNOWLEDGMENTS

This study would not have been possible without the guidance and expertise of Dr. Ilya Yaroslavsky, our faculty advisor, and the Choose Ohio First Program. Special thanks to Dr. Anne Su, Kara D’Angelos, and Kendra Helfrich for guiding the Choose Ohio First program and our research.

REFERENCES

Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66, 7-18.

Ekers, D., Richards, D., & Gilbody, S. (2008). A meta-analysis of randomized trials of behavioural treatment of depression. *Psychological Medicine*, 38(5), 611-623.

Gallagher, D. E., & Thompson, L. W. (1982). Treatment of major depressive disorder in older adult outpatients with brief psychotherapies. *Psychotherapy: Theory, Research and Practice*, 19(4), 482-490.

Kanter, J. W., Manos, R. C., Bowe, W. M., Baruch, D. E., Busch, A. M., & Rusch, L. C. (2010). What is behavioral activation? A review of the empirical literature. *Clinical Psychology Review*, 30(6), 608-620.

Kanter, J. W., Santiago-Rivera, A. L, Santos, M. M., Nagy, G., Lopez, M., Dieguez Hurtado, G., & West, P. (2015). A randomized hybrid efficacy and effectiveness trial of behavioral activation for Latinos with depression. *Behavior Therapy*, 46, 177-192.

McLean, P. D., & Hakstian A. R. (1979). Clinical depression: comparative efficacy of outpatient treatments. *Journal of Consulting and Clinical Psychology*, 47(5), 818-836.

McLean, P.D., & Hakstian, A.R. (1990). Relative endurance of unipolar depression treatment effects: Longitudinal follow-up. *Journal of Consulting and Clinical Psychology*, 58, 482–488.

Puig, F., & Encinas, F. (2012). Effectiveness of cognitive-behavioral treatment for major depressive disorder in a university psychology clinic. *The Spanish Journal of Psychology*, 15(3), 1388-1399.

Mazzucchelli, T., Kane, R., & Rees, C. (2009). Behavioral activation for depression in adults: a meta-analyses and review. *Clinical Psychology: Science and Practice*, 16(4), 383-411.

Mazzucchelli, T., Kane, R., & Rees, C. (2010). Behavioral activation interventions for well-being: a meta-analysis. *The Journal of Positive Psychology*, 5(2), 105-121

Tolin, D. F., McKay, D., Forman, E. M., Klonsky, E. D., & Thombs, B. D. (2015). Empirically supported treatment: recommendations for a new model. *Clinical Psychology: Science and Practices*, 22(4), 317-338.

Richards, D. (2011). Prevalence and clinical course of depression: A review. *Clinical Psychology Review*, 31(7), 1117-1125.