HOPE AND ATTRITION IN A BRIEF INTENSIVE OUTPATIENT DIALECTICAL BEHAVIOR THERAPY PROGRAM

Craig Warlick

Submitted to the graduate degree program in Educational Psychology and the Graduate Faculty at the University of Kansas in partial fulfillment for the requirements for the degree of Doctor of Philosophy

_____

Chair: Thomas Krieshok, Ph.D.

_____

Juliet Nelson, Ph.D.

_____

Bruce Frey, Ph.D.

_____

Barbara Kerr, Ph.D.

_____

Mary Fry, Ph.D.

Date Defended: 08 September 2017

The dissertation committee for Craig Warlick

certifies that this is the approved version of the following dissertation:

HOPE AND ATTRITION IN A BRIEF INTENSIVE OUTPATIENT DIALECTICAL BEHAVIOR THERAPY PROGRAM

_____

Chair: Thomas Krieshok, Ph.D.

Date Approved: 08 September 2017

Abstract

Positive Psychology (PP) and Dialectical Behavior Therapy (DBT) are two growing fields within psychology. However, despite this growth, both fields remain unbalanced. PP is unbalanced regarding their population samples. Much research focuses on non-clinical samples, which prevents testing whether well-being can be improved in symptomatic individuals. DBT aims to create "a life worth living" in clients. However, most research focuses on reduction of symptoms, not necessarily the promotion of strengths. Integrating PP and DBT allows for the testing of PP constructs and interventions within a higher symptomatic clinical sample, while also providing opportunities to see how DBT may promote the strengths of clients towards a higher quality of life. Additionally, there remains a need for additional information regarding effectiveness of brief DBT community programs. Given mutual strengths, it remains logical to integrate PP constructs into DBT. Also, given previous integration in clinical populations, hope remains an ideal candidate for this intersection. The Integrated Hope Scale (IHS) needs exploration within an American clinical population. As such, this study assessed the role of hope and its relation to program completion in a brief intensive outpatient DBT community program. Exploratory factor analysis yielded four factors that were novel compared with previous findings. Additionally, hope at entry was unable to predict graduation status, nor was it able to distinguish between graduates and non-graduates at the final completed session. Lastly, hope did not significantly increase during time in DBT. The significance of this study remains that hope may have a different factor structure in an American clinical population and it provides evidence that a central PP construct, hope, possesses little importance regarding a treatment in a brief, intensive-outpatient mixed diagnostic DBT population. Implications for researchers and clinicians are discussed.

Acknowledgements

Amy, thank you for being you. Graduate school--much less dissertation--would not have been possible without your strength and your support. Life with you is always a life worth living.

Professor, thank you for always welcoming me into your open office door, and for encouraging my engagement in the many worlds of psychological work. I could not have asked for a better doctoral adviser. You model so well that an academic can be reputable and they can be humble. Knowing there are academics, and people, like you gives me hope for the future.

Julie, you have been my teacher, my DBT guru, and my very much appreciated reminder that I am not a "human doing, but a human being." I am so grateful that you have taken so much time from your own journey on your mountain to help me navigate my own.

My Bert Nash Consultation Teams of past and present, I thank you for your willingness to shape, and to be shaped by, me. I think much of my affinity for DBT comes as a result of my affinity for y'all and for the wonderful work that you do.

Dr. Frey, you provided so much structure and guidance on my fumbling adventures in statistics. It has opened up my world towards better understanding and creating research.

Dr. Kerr, I can't imagine the faith it took to allow not one, but two students to undertake a longitudinal study with a clinical sample for dissertation. Your trust strengthened my own.

Dr. Fry, teaching me to focus on process, not just outcomes changed my perspective on graduate school. It took me down a path not foreseen, and that has made an enormous difference.

Dr. Mikinski, thank you for making that phone call that gave me the desire to move to Kansas. Your guidance, past and present, has been instrumental in my development.

Tim and Nadine, thank you for years of lessons, support, and belief.

Arsene and Linda, thank you for your trust in me, and your trust in Amy and me.

John and Evelyn, Mary and Louis, thank you for my roots--they are strong.

Indy and Colt, thank you for always being my faithful writing partners and perfect models of mindfulness.

Paul and Michael. Paul, thank you for pulling me on that first project—and your incessant belief that it would publish. It made such a difference. Michael, thank you for your willingness to ignore the hour and guide me through so much. I look forward to many more years of outlines, edits, celebrations, and friendship with you both.

Grant & Sherman, thank you for your accountability, your guidance, and your friendship. There is no one with whom I would rather walk regarding the struggles of our profession.

Leslie, thank you for taking that walk and listening to a pitch about a research idea. Your presence and support turned those early struggles from "this is impossible" to "maybe, we got this?" levels of manageable.

Kelsey, Brynne, Jessica, Julia, and many others, thank you for all of their assistance with data collection. This project, and all of our projects, does not happen without your support.

Robyn, thank you for helping me learn how to steer my own ship

To the inhabitants of Hoover 105 and Massachusetts 2135, I am forever grateful for your friendship and your eternal openness towards checking out a college football game.

Drs. Mark Davis, Robert Ware, Joe Taylor, Richard Schellhammer, Stephen Slimp, and all of UWA College of Liberal Arts, thank you for teaching me to "learn how to learn."

Lastly, thank you to my clients—you have shaped me, taught me, humbled me, and you still inspire me to focus on how to help make therapy better for those who trust us with so much.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

A Call for Hope: The Mutually Beneficial Integration of Positive Psychology and Dialectical Behavior Therapy

Craig Warlick

Correspondence concerning this manuscript should be addressed to Craig Warlick, Department of Educational Psychology, University of Kansas, 1122 W. Campus Rd., JR Pearson Hall, Room 621, Lawrence, Kansas 66045 or via email: cwarlick@ku.edu

[1]University of Kansas [2] Bert Nash Community Mental Health Center, Lawrence, Kansas

Abstract

Positive Psychology and Dialectical Behavior Therapy are two growing fields within psychology. However, despite this growth, both fields remain unbalanced. Positive Psychology is unbalanced regarding their population samples. Much research focuses on non-clinical samples, which prevents testing whether well-being can be improved in symptomatic individuals. Dialectical Behavior Therapy aims to create "a life worth living" in clients. However, most research focuses on reduction of symptoms, not necessarily the promotion of strengths. Integrating Positive Psychology and Dialectical Behavior Therapy allows for the testing of Positive Psychology constructs and interventions within a higher symptomatic clinical sample, while also providing opportunities to see how Dialectical Behavior Therapy may promote the strengths of clients towards a higher quality of life. Hope may be an ideal positive psychology construct to commence this mutually beneficial integration. Practical implications and potential directions of this emerging research intersection are further discussed.

Keywords: Positive Psychology, Dialectical Behavior Therapy, hope

Public significance statement: Positive Psychology and Dialectical Behavior Therapy (DBT) are two growing fields within psychology. This manuscript argues that integrating these areas would provide better balance to both fields, by testing whether Positive Psychology constructs matter, specifically the construct of hope, in the treatment of a more symptomatic clinical population.

A Call for Hope: The Mutually Beneficial Integration of Positive Psychology and Dialectical Behavior Therapy

This review argues for the integration of a critical construct in Positive Psychology (PP), hope, into Dialectical Behavior Therapy (DBT), to ascertain a better balance regarding recognition of the strengths and the sufferings of human beings. This article commences with a brief review of PP examining its strengths and its gaps, specifically gaps acknowledging the "less than positive", and gaps focused on the dearth of data testing PP concepts within treatments for individuals who suffer at a clinical level. DBT serves as an environment in which to test PP's concepts. In addition, PP and DBT may each help expand the other's lens by supplementing their own strengths with one another's aptitudes. Hope may serve as an ideal candidate to foment this necessary intersection between PP and DBT.

Positive Psychology

PP emerged in reaction to mainstream psychology's perceived purview of humanity's negative qualities (Keyes & Haidt, 2003). Researchers claim roots from William James, to Gordon Allport, to Abraham Maslow (Gable & Haidt, 2005) as leaders in efforts to understand "what makes life worth living" (Wong, 2011, p.69). These roots, and a desire to provide science on the end of the traditional psychology spectrum opposite of psychopathology, provided life to a specialty that has grown exponentially since Seligman and Csikszentmihalyi's address in the *American Psychologist* (2000). Journals have been founded (e.g. *Journal of Positive Psychology*), handbooks compiled (e.g. Lopez & Snyder, 2003), and a myriad of articles published. The findings remain notable and too numerable to list presently. By way of example, positive emotions can act as buffers for the prevention of physical illness (Frederickson, 2001); forgiveness relates positively to life-satisfaction (Toussaint et al., 2001); and researchers and

clinicians can create PP interventions enhancing subjective and psychological well-being (Bolier et al., 2013). In addition to providing benefits in everyday existence, these positive elements can be manipulated to enhance the benefits already enjoyed by human beings.

There also remain criticisms of PP. Chiefly, through the focus on the positive, the "negative" remains latent, but still present. The benefits and presence of "negative" emotions remain ignored (Wong, 2011). These moments in which "negative" emotions weigh heaviest, may be "where life is most alive for us" (Leitner, 2003), where perhaps, the human experience remains richest. The insular focus on the positive ignores the other side of the dialectic. This was not an aim of PP (e.g. Snyder & Lopez, 2007), but it remains a criticism which needs to be rectified (Gable & Haidt, 2005). Both the "positive" and "the less than positive" occur every day, sometimes prompted in the same moment (Leitner, 2003). There needs to be additional focus on the research of PP constructs, while they remain co-occurring with the "less than positive" constructs.

An additional notable criticism regards the limited evidence of PP effectiveness for those who are suffering, namely those with clinical levels of suffering. Frank and Frank (1991) noted that when an individual seeks services while suffering, it remains the therapist's job to facilitate the restoration of that individual back towards greater levels of functioning. Strengths can be useful in this effort--and much of PP's efficacy has been demonstrated with typically healthier samples in community and university settings. In Bolier and colleagues' meta-analytic review of 39 randomized controlled PP intervention studies (2013), only three studies included individuals with clinical diagnoses: major depressive disorder in Fava, Rafanelli, Cazzaro, Conti, and Grandi, (1998), as well as with the work of Seligman, Rashid, and Parks (2006), and generalized anxiety disorder detailed in Fava and colleagues (2004). As such, the field of PP cannot currently

assume that PP interventions promote desirable outcomes with clinical samples. Suffering is suffering and in order to follow Frank and Frank's (1991) purpose of psychotherapy, and to advance PP research, additional forays into clinical populations--with those individuals who are suffering at a clinical level--remains essential (Wood & Tarrier, 2010).

Dialectical Behavior Therapy

With similar goals, DBT remains one potential area of integration of PP into psychotherapy research with clinical populations. PP desires to promote well-being; DBT desires to help move the "client from a life in hell to a life worth living as quickly and efficiently as possible" (Dimeff & Linehan, 2001, p. 12). That commonality, promoting that which is good, is essential to both PP and DBT. Developed originally as treatment for Borderline Personality Disorder (BPD; Linehan, 1993), DBT hinges on therapists and clients balancing a primary dialectic of acceptance and change strategies. Both sides of this dialectic, acceptance and change, may facilitate the development of strengths.

DBT uses biosocial development theory to explain emotional dysregulation. Ultimately, dysregulation occurs as a result of the transaction between biology, specifically a genetic vulnerability to emotional stimuli, and an invalidating environment. This multimodal treatment consists of individual therapy, group-skills training, phone coaching, and a therapist consultation team (Linehan, 1993). Stages of treatment vary, focusing initially on stabilizing the client, decreasing suicidal behaviors and nonsuicidal self-injury, addressing therapy interfering behaviors (e.g. missing sessions), and decreasing quality of life interfering behaviors (e.g. attending to substance dependence). Stage two follows, focusing on eliminating traumatic experiences of emotional stimuli. Treatment stages three and four aim to achieve "ordinary happiness and unordinary happiness," to mitigate incompleteness, and to "achieve joy" (Dimeff

& Linehan, 2001, p. 11). PP may be effective in helping identify characteristics grown in clients throughout DBT that move them towards that "life worth living."

Additionally, DBT's efficacy of this treatment in randomized-controlled trials (RCTs) has generalized from BPD-specific to treatment of other disorders, as well as problems in living. These include involving clients with major depressive disorder (Feldman, Harley, Kerrigan, Jacobo, & Fava, 2009), bipolar disorder (Goldstein, Axelson Birmaher, & Brent, 2007; van Dijk, Jeffrey, & Katz, 2012), eating disorders (Hill, Craighead, & Safer, 2011; Safer, Telch, & Agras, 2001; Telch, Agras, & Linehan, 2001), and women who are substance-dependent multidisordered with the diagnosis of BPD (Linehan, Schmidt, Dimeff, Craft, Kanter & Comtois, 1999).

Additionally, these studies occurred in a variety of settings, including university outpatient clinics (Hill, Craighead, & Safer, 2011), community outpatient clinics (e.g. Neacsiu, Rizvi, & Linehan, 2010), addiction treatment centers (van den Bosch, Verheul, Schippers, & van den Brink, 2002), and Veterans Administration clinics (Koons, et al., 2001). While criticisms of RCTs are noted (e.g. Hollon & Wampold, 2009), a strong argument exists that people with a variety of severe symptomology, in a variety of treatment settings, improve while in DBT. This argument remains especially strong regarding decreasing suicidal and nonsuicidal self-injurious (NSSI) behaviors by roughly two thirds in clients with BPD (Panos, Jackson, Hasan & Panos, 2014). Regarding treatment, DBT possesses significant strengths.

DBT also has its criticisms. From a clinical perspective, the treatment matches the clients in complexity. It requires a high level of knowledge and skill regarding behavior therapy that may overwhelm novice therapists (Rizvi, 2011). The learning demands of DBT have been shown to increase stress in health workers (Perseius, Kaver, Ekdahl, Asberg, & Samuelsson, 2007). In

session, a concern exists regarding minimizing group process in the skills-training groups (Springer & Silk, 19996). Administratively, there are difficulties in implementing a DBT program regarding development, maintaining staffing, client recruitment, administrative support, and the time commitment required (Carmel, Rose, & Fruzetti, 2014).

Regarding research in DBT, there remains a gap in the dialectic---it remains unbalanced regarding its focus on psychopathology. Out of the 36 RCTs published on DBT and DBT skills groups (Linehan, Dimeff, Koerner, K.& Miga, 2013), there remain no known findings regarding treatment stages three and four in which PP constructs could be easily assessed. Only one study, Ritschel, Cheavens, and Nelson (2012) used hope, a prominent PP construct, within DBT treatment, finding significant increases in hope during treatment, and in hope's ability to predict changes in depression and anxiety. Given the treatment hierarchy of DBT, and the risk level of clientele at entry, this imbalance in assessing pathology-based constructs may be necessary. Assessments of depression, stress, anxiety, and dysregulation remain essential to treatment. However, PP research can supplement pathology-based research in treatment. Hope remains an ideal candidate to serve as a supplement. It increases the working alliance (Maygar-Moe, Edwards, & Lopez, 2001), which has been shown in DBT to reduce suicide attempts, as well as NSSI (Bedics, Atkins, Harned & Linehan, 2015). Additionally, Duckworth, Steen, and Seligman (2005) suggest that gains attributed previously to "nonspecific factors" may be better explained by PP constructs such as the facilitation of hope (Snyder, Ilardi, & Cheavens, 2000). Given the need of PP to integrate deeper into clinical populations, and DBT's heavy imbalance on pathology-based assessments, an integration between PP and DBT may be mutually beneficial. It would both allow PP constructs to be tested in a clinical population, and permit DBT and PP to expand their purview past their respective strengths. Hope remains one ideal candidate to

commence this integration, as a construct central to PP with broad implications in education, psychology, and treatment of suicidal individuals.

Hope

Hope has remained an integral part of the human condition across centuries and across cultures. From the myth of Pandora's box, where all evils and gifts are released into the world, but hope is saved, to the gates of hell in Dante's *Inferno,* where those who enter are notified to "Abandon all hope, ye who enter here," it remains better to possess hope than to be without hope. "Genuine hope" is revered (Tillich, 1965), and the study of hope, and the role it plays in the microcosm of the human experience that is psychotherapy, remains essential for this field.

Hope and Mental Health

"The miserable have no other medicine, but only hope" (Shakespeare & Lever, 2012, lines 1224-1226). Like with Panodra's Box, in the depths of suffering, hope may be the only gift remaining. Karl Menninger called for scientists to share a simple concept: hope matters (1959). Since that call, and the question of Don Clifton to better understand human beings by also studying "what is right with people" (Lopez & Snyder, 2003, pp. xv), the study of hope, specifically within the microcosm of psychotherapy, has grown. Hope has been associated with higher well-being, the ability to regulate emotions, and higher coping skills (e.g. Irving, et al., 2004). High levels of hope are also related to lower levels of depression (e.g. Gefkin et al., 2006) and lower levels of anxiety (e.g. Arnau, Rosen, Finch, Rhudy, & Fortunato, 2007). In treatment, hope correlates with positive outcomes, especially related to goal attainment (Frank, 1973; 1991) and building and sustaining recovery (e.g. Andersen, Oades, & Caputi, 2003). Snyder, Michael, and Cheavens (1999) posited that hope remains a common factor of successful psychotherapy outcomes.

Hope may be most needed, and where clinically significant outcomes may be most noted, with individuals who are severely, persistently, or terminally ill. Within a chronically ill population, hope contributes to efficacious therapy. Its counterpoint, hopelessness, can help predict suicide (Akiskal, 2007; Kim, Kim, Schwartz-Barcott, & Zucker, 2008). Hope must coexist with help in any intervention method associated with preventing suicide or suicide attempts (Hanna, 1991; Roswarski & Dunn, 2009). Hope is not solely part of the human experience; it is a part of the human experience that possesses clinical importance. Hope may be especially relevant to DBT as that central component in growth from early stages of treatment focused on decreasing suicidal behaviors to the later stages of treatment focused on achieving and accepting feelings of joy.

Integrating Hope into DBT

PP possesses many successes. Research demonstrates that through interventions, human beings can increase their well-being. However, large criticisms remain regarding ignoring one half of the dialectic, the "less than positive," (Leitner, 2003, p. 10) as well as not examining the effectiveness of PP in clinical populations. Following in the tradition of Menninger (1959), Clifton (Lopez & Snyder, 2003), and Schrank and colleagues (2008), this paper calls for the application of the gains of PP associated with achievement, attainment, and well-being to more severe populations as an enhancement to treatment of illness. Doing so will more fully elucidate all available options of how to help clients build a life worth living, and further the effectiveness of PP. These concepts, specifically hope, need to be included in the treatment of those who suffer at clinical levels. An environment in which this application of PP may be testable would be a treatment that involves clients with severe and persistent mental illness. As 70–80% of all BPD

patients engage in either suicidal, parasuicidal, or a combination of both behaviors (Linehan et al., 2006) a treatment created for BPD—DBT---fits these criteria.

DBT has proven repeatedly to assist those suffering from a variety of diagnoses, in a variety of treatment settings. Its strength remains its integrative nature, balancing acceptance of individuals as they are, while insisting upon change towards betterment of the individual. Empirical evidence supports DBT's efficacy and its effectiveness. To date, the overwhelming majority of this evidence focuses on the mitigation of pathology. Integrating with PP researchers and clinicians would allow DBT to continue its strength of mitigating pathology, while building research focused on the other side of the dialectic, one focused on strengths and virtues that help enhance the quality of human life. Integrating with DBT researchers and clinicians would allow PP to continue its strength of enhancing well-being, while also testing its constructs in a severe clinical population.

Practical Implications and Future Directions

To begin this integrating process, the researchers propose three specific areas that may be fruitful, yet practical for testing PP concepts in DBT environments. The first area proposed would be integrating research on PP concepts into existing outcome-based research in clinical settings. Given that much DBT research focuses on symptomology, implementing PP scales into this battery would allow researchers and clinicians to still track the traditional markers of successful DBT treatment, as well as explore how PP constructs perform throughout treatment with this population.

A second proposed area focuses on partial-hospital and intensive programs. These outpatient programs are designed as alternatives to or transitions from inpatient hospitalization, and often possess multiple hours of programming per day. Additionally, Lothes and colleagues

(2014) call for more assessment of outcome data, specifically in DBT-informed partial-hospital programs (PHPs). This environment that needs to assess clinical outcomes, combined with the more severe acute population which it typically serves, may be an ideal environment to test PP interventions. Integrating PP interventions regularly into PHPs would allow researchers to compare outcomes from their regular DBT-informed PHP and their PP infused, DBT-informed PHP, to assess if PP interventions affect outcomes in this population. Additionally, the qualitative data garnered from clients and clinicians in this program may be beneficial in targeting which PP constructs may be most applicable to this population, and the role in which these clients may view PP. Findings from these two areas may increase the quality of treatment, as well as provide fodder for grants applications to fund the testing of PP constructs in RCT designs.

Lastly, while it does not directly involve therapy, it may be beneficial for therapy to explore this integration in clinicians, as well as clients. Given the challenges of implementing DBT (e.g. Perseius et al., 2007), and hope's associations with burnout in clinicians (Warlick, Farmer, Vigil, & Krieshok, 2017), a practical area of integration of PP and DBT may be to track hope in clinicians. This assessment of hope may be most beneficial throughout the initial training and learning of DBT, as well as providing added benefit from tracking it as part of regular supervision, ongoing training, and during consultation team.

Conclusion

PP and DBT both remain strong, growing fields. It is likely this growth will continue to persist continuing along their respective paths, even if they remain isolated from one another. However, integrating PP and DBT allows both areas to become more comprehensive, allows for acknowledging both strengths and suffering of human existence, and integration allows for

achieving their mutual goal of helping individuals build and maintain a “life worth living.” Integrating PP and DBT is a mutually beneficial opportunity—one that needs investigating by researchers and clinicians, alike.

References

Akiskal, H. (2007). Targeting suicide prevention to modifiable risk factors: Has Bipolar II been overlooked? *Acta Psychiatry Scandanavica, 116*, 395–402.

Arnau, R.C., Rosen, D.H., Finch, J.F., Rhudy, J.L., & Fortunato, V.J. (2007). Longitudinal effects of hope on depression and anxiety: A latent variable analysis. *Journal of Personality, 75*, 43-63.

Bedics, J. D., Atkins, D. C., Harned, M. S., & Linehan, M. M. (2015). The therapeutic alliance as a predictor of outcome in dialectical behavior therapy versus nonbehavioral psychotherapy by experts for borderline personality disorder. *Psychotherapy*, *52*(1), 67.

Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive Psychology interventions: A meta-analysis of randomized controlled studies. *BMC Public Health*, *13*(1), 119.

Carmel, A., Fruzzetti, A. E., & Rose, M. L. (2014). Dialectical behavior therapy training to reduce clinical burnout in a public behavioral health system. *Community Mental Health Journal*, *50*(1), 25-30.

Carmel, A., Rose, M. L., & Fruzzetti, A. E. (2014). Barriers and solutions to implementing dialectical behavior therapy in a public behavioral health system. *Administration and Policy in Mental Health and Mental Health Services Research*, *41*(5), 608-614.

Dimeff, L., & Linehan, M. M. (2001). Dialectical behavior therapy in a nutshell. *The California Psychologist*, *34*(3), 10-13.

Fava, G. A., Rafanelli, C., Cazzaro, M., Conti, S., & Grandi, S. (1998). Well-being therapy. A novel psychotherapeutic approach for residual symptoms of affective disorders. *Psychological Medicine*, *28*(02), 475-480.

Fava, G. A., Ruini, C., Rafanelli, C., Finos, L., Salmaso, L., Mangelli, L., & Sirigatti, S. (2004). Well-being therapy of generalized anxiety disorder. *Psychotherapy and Psychosomatics*, *74*(1), 26-30.

Feldman, G., Harley, R., Kerrigan, M., Jacobo, M., & Fava, M. (2009). Change in emotional processing during a dialectical behavior therapy-based skills group for major depressive disorder. *Behaviour Research and Therapy*, *47*(4), 316-321.

Frank, J. D. (1973). Persuasion and healing: A comparative study of psychotherapy (Rev. ed). Baltimore: Johns Hopkins University Press.

Frank, J. D., & Frank, J. B. (1991). Persuasion and healing. Baltimore: Johns Hopkins University Press.

Gable, S. L., & Haidt, J. (2005). What (and why) is Positive Psychology? *Review of General Psychology*, *9*(2), 103.

Goldstein, T. R., Axelson, D. A., Birmaher, B., & Brent, D. A. (2007). Dialectical behavior therapy for adolescents with bipolar disorder: a 1-year open trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, *46*(7), 820-830.

Hanna, F. J. (1991). Suicide and hope: The common ground. *Journal of Mental Health Counseling, 13,* 459–472.

Hill, D. M., Craighead, L. W., & Safer, D. L. (2011). Appetite focused dialectical behavior therapy for the treatment of binge eating with purging: A preliminary trial. *International Journal of Eating Disorders*, *44*(3), 249-261.

Hollon, S.D., & Wampold, B.E. (2009). Are randomized controlled trails relevant to clinical practice? *The Canadian Journal of Psychiatry/La Revue Canadienne de Psychiatrie*, *54*(9), 637-643.

Irving, L.M., Snyder, C.R., Cheavens, J.S., Gravel, L., Hanke, J., Hilberg, P., & Nelson, N. (2004). The relationships between hope and outcome at pretreatment, beginning, and later phases of psychotherapy. *Journal of Psychotherapy Integration*, *14*(4), 419–443. doi:10.1037/1053-0479.14.4.419

Kim, D.S., Kim, H.S., Schwartz-Barcott, D., & Zucker, D. (2006). The nature of hope in hospitalized chronically ill patients. *International Journal of Nursing Studies*, *43*, 547–556.

Koons, C. R., Robins, C. J., Tweed, J. L., Lynch, T. R., Gonzalez, A. M., Morse, J. Q., ... & Bastian, L. A. (2001). Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. *Behavior Therapy*, *32*(2), 371-390.

Leitner, L. M. Honoring suffering, tragedy, and reverence: The fully human is more than positive. (2003). Paper presented at the American Psychological Association Convention, Toronto, Canada.

Linehan, M.M. (1993a). Cognitive-behavioral treatment of borderline personality disorder. New York: Guilford Press.

Linehan, M.M., Dimeff, L., Koerner, K, & Miga, E.M. (2013, December). Research on Dialectical Behavior Therapy: Summary of the data to date. Retrieved April 8, 2017, from http://behavioraltech.org/downloads/research-on-dbt-summary-of-data-to-date.pdf

Linehan, M. M., Schmidt, H., Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug dependence. *The American Journal on Addictions*, *8*(4), 279-292.

Lothes, J. E., Mochrie, K. D., & St John, J. (2014). The effects of a DBT informed partial hospital program on: depression, anxiety, hopelessness, and degree of suffering. *Journal of Psychology & Psychotherapy*, *4*(3), 1.

Lopez, S. J., & Snyder, C. R. (Eds.). (2003). Positive psychological assessment: A handbook of models and measures.

Neacsiu, A. D., Rizvi, S. L., & Linehan, M. M. (2010). Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder. *Behaviour Research and Therapy*, *48*(9), 832-839.

Panos, P.T., Jackson, J.W., Hasan, O., Panos, A. (2014). Meta-analysis and systematic review assessing the efficacy of Dialectical Behavior Therapy. *Research on Social Work Practice*, *24*(2), 213-223.

Perseius, K. I., Kåver, A., Ekdahl, S., Åsberg, M., & Samuelsson, M. (2007). Stress and burnout in psychiatric professionals when starting to use dialectical behavioural therapy in the work with young self-harming women showing borderline personality symptoms. *Journal of Psychiatric and Mental Health Nursing*, *14*(7), 635-643.

Ritschel, L.A., Cheavens, J.S., & Nelson, J. (2012).Dialectical behavior therapy in an intensive outpatient program with a mixed-diagnostic sample. *Journal of Clinical Psychology*, *68*(3), 221-235. DOI: 10.1002/jclp.20863

Roswarski, T.E., & Dunn, J.P. (2009). The role of help and hope in prevention and early intervention with suicidal adolescents: Implications for mental health counselors. *Journal of Mental Health Counseling*, *31*(1), 34-46.

Safer, D. L., Telch, C. F., & Agras, W. S. (2001). Dialectical behavior therapy for bulimia nervosa. *American Journal of Psychiatry*, *158*(4), 632-634.

Schrank, B., Stanghelilini, G., & Slade, M. (2008). Hope in psychiatry: A review of the literature. *Acta Psychiatrica Scandinavica, 118,* 421-433.

Schrank, B., Woppmann, A., Sibitz, I., Lauber, C., 2011. Development and validation of an integrative scale to assess hope. *Health Expectations. 1*, 417–428.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.

Seligman, M. E., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist*, *61*(8), 774.

Shakespeare, W., & Lever, J. W. (2012). *Measure for measure*. London: Bloomsbury Arden Shakespeare.

Snyder, C. R., & Lopez, S. J. (2007). Positive Psychology: The scientific and practical explorations of human strengths. Thousand Oaks, CA: Sage.

Snyder C.R., Ilardi S, Michael S, & Cheavans J. (2000). Hope theory: updating a common process for psychological change. In Handbook of Psychological Change: Psychotherapy Processes and Practices for the 21st Century, ed. C. Snyder, R. Ingram, pp. 128–53. New York: Wiley

Snyder, C.R., Ilardi, S.S., Cheavens, J., Michael, S.T., Yamhure, L., & Sympson, S. (2000). The role of hope in cognitive-behavior therapies. *Cognitive Therapy and Research*, *24*(6), 747–762. doi:10.1023/A:1005547730153

Snyder, C. R., Michael, S., & Cheavens, J. (1999). Hope as a psychotherapeutic foundation of nonspecific factors, placebos, and expectancies. In M. A. Huble, B. Duncan, & S. Miller (Eds.), Heart and soul of change (pp. 179–200). Washington, DC: American Psychological Association.

Springer, T., & Silk, K. R. (1996). A review of inpatient group therapy for borderline personality disorder. *Harvard Review of Psychiatry*, *3*(5), 268-278.

Telch, C. F., Agras, W. S., & Linehan, M. M. (2001). Dialectical behavior therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology*, *69*(6), 1061.

Toussaint, L. L., Williams, D. R., Musick, M. A., & Everson, S. A. (2001). Forgiveness and health: Age differences in a US probability sample. *Journal of Adult Development*, *8*(4), 249-257.

van den Bosch, L. M., Verheul, R., Schippers, G. M., & van den Brink, W. (2002). Dialectical behavior therapy of borderline patients with and without substance use problems: Implementation and long-term effects. *Addictive Behaviors*, *27*(6), 911-923.

van Dijk, S., Jeffrey, J., & Katz, M. R. (2013). A randomized, controlled, pilot study of dialectical behavior therapy skills in a psychoeducational group for individuals with bipolar disorder. *Journal of Affective Disorders*, *145*(3), 386-393.

Warlick, C., Farmer, N.M., Vigil, K., & Krieshok, T.S. (2017). Keeping the Candle Lit: The Role of Hope in Burnout. *Positive Psychology: Theory and Application*.

Wong, P. T. (2011). Positive Psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology/Psychologie Canadienne*, *52*(2), 69.

Chapter 2

Hope and Attrition in a Brief Intensive Outpatient Dialectical Behavior Therapy Community Health Sample

Craig A. Warlick[1,2]

The University of Kansas

Correspondence concerning this proposal should be addressed to Craig Warlick, Department of Educational Psychology, University of Kansas, 1122 W. Campus Rd., JR Pearson Hall, Room 621, Lawrence, Kansas 66045 or via email: cwarlick@ku.edu

[1]University of Kansas [2] Bert Nash Community Mental Health Center, Lawrence, Kansas

Abstract

Positive Psychology (PP) and Dialectical Behavior Therapy (DBT) are two growing fields. PP experiences a persistent criticism regarding a dearth of data regarding PP constructs and interventions within clinical populations. Additionally, there remains a need for additional information regarding effectiveness of brief DBT community programs. Given mutual strengths, it remains logical to integrate PP constructs into DBT. Also, given previous integration in clinical populations, hope remains an ideal candidate for this intersection. The Integrated Hope Scale (IHS) needs exploration within an American clinical population. As such, this study assessed the role of hope and its relation to program completion in a brief intensive outpatient DBT community program. First, exploratory factor analysis yielded four factors that were novel compared with previous findings. Additionally, hope at entry was unable to predict graduation status, nor was it able to distinguish between graduates and non-graduates at the final completed session. Lastly, hope did not significantly increase during time in DBT. The significance of this study remains that hope may have a different factor structure in an American clinical population and it provides evidence that a central PP construct, hope, possesses little importance regarding a treatment in a brief, intensive-outpatient mixed diagnostic DBT population. Implications for researchers and clinicians are discussed.

Public Significance Statement: This study details that hope may have a different composition within Americans who are seeking intensive psychotherapy services and it provides further evidence that hope remains trait in nature, rather than temporal. Additionally, it illuminates the lack of importance this positive psychology construct possesses regarding graduation rates in a clinical population.

Keywords: Positive Psychology, Dialectical Behavior Therapy, Hope.

Hope and Attrition in a Brief Intensive Outpatient Dialectical Behavior Therapy Community Health Sample

Literature Review

Positive psychology (PP) and Dialectical Behavior Therapy (DBT) are two fields of psychology experiencing significant growth. However, a gap exists in positive psychology regarding its legitimacy in clinical populations. Additionally, DBT possesses a gap regarding the effectiveness of brief interventions in "real-world" settings outside of randomized clinical trials (Ritschel, Cheavens, & Nelson 2012). Following the call of Warlick, Nelson, Krieshok, & Frey (in-review), this study addresses this gap through integrating a common construct in positive psychology literature, hope, into a brief intensive outpatient (IOP) DBT population in a community mental health clinical sample. In doing so, this study remains the first known to examine the factor structure of integrated hope in an American clinical population and it further assesses hope's relationship to program completion, a key target throughout DBT literature.

Positive Psychology

PP, a field which focuses on strengths and improving well-being, has grown, and remains growing. Evidence of this paradigm shifting towards increasing more "positive" in the study of human beings exists regarding the transition of PP's science transitioning from revolutionary (e.g. Seligman, 2000) springing as a reaction away from the perceived pathological focus of psychology to what may be referenced as much more "normal science" (Kuhn, 1962). Much of this normal science work now focuses on applied positive psychology, a study derived from PP that focuses on the "facilitation of optimal functioning" (Linley & Joseph, 2004, p.4). A focus of this remains not just constructs that are considered more positive psychology in nature, but the

development of positive psychology interventions. Growth continues in this direction; Bolier and colleagues' (2013) meta-analytic review demonstrates that efficacy exists for these interventions.

One gap evident in that meta-analytic review remains regarding the efficacy of interventions with samples of individuals who meet criteria for clinical diagnoses. This noted critique of PP persists; calls have been issued to incorporate PP into clinical groups (e.g. Wood & Tarrier, 2010) and in specific clinical groups, like those individuals who meet criteria for posttraumatic stress disorder (Linley, Joseph, Harrington, & Wood, 2006). While there have been interventions that have used clinical populations (e.g. Seligman, Rashid, & Parks, 2006), there remains further positive psychology research to be conducted in this area. One way to continue this integration of PP into clinical populations involves incorporating concepts used heavily in PP and integrating them into psychotherapy research.

Dialectical Behavior Therapy

Like PP, DBT, a treatment which balances dialectical strategies of acceptance and change, has grown, and continues to grow. The multimodal treatment consists of individual therapy, group skills training, telephone coaching, and a clinician consultation team, and a focus remains on the four core modules, mindfulness, emotion regulation, distress tolerance, and interpersonal effectiveness. Since the first randomized-controlled trial (RCT) on DBT published in 1991 (Linehan, et al. 1991), twenty more articles focusing on RCTs have been published collecting data from 8 different countries (Linehan, 2016a). Additionally, 15 more articles focusing on RCTs and DBT skills group were published using samples from four different countries (Linehan, 2016b). A plethora of evidence for the efficacy of DBT exists at the national and international level. This track record of efficacy, along with its focus on moving clients from stabilization in stage one of treatment to achieving joy in stage four of treatment (Dimeff &

Linehan, 2001), makes DBT a viable candidate for the integration of positive psychology constructs.

However, DBT still possesses areas of growth. Two areas remain especially salient for this study. The first involves duration of treatment. While there are many gains that occur for clients in DBT over a period of 12 months in a community health setting (e.g. Comtois et al., 2007), and a period of 6 months (e.g. Pasieczny, & Connor, 2011), and evidence exists regarding efficacy for brief programs (e.g. 8 weeks in Rizvi & Steffel, 2014), there needs to be more research into length of time in DBT needed to obtain desirable outcomes (Rizvi, Hughes, Hittman, and Oliveira, 2017). IOPs, which may serve as a transitionary period for clients, may be an ideal place to investigate.

The second gap involves the implementation of DBT, specifically in community settings (Chugani, Mitchell, Botanov, & Linehan, 2017). Put simply, public behavioral health benefits from DBT to facilitate treatment of high-risk clients (Carmel & Rose, 2015). While examining barriers to implementation of DBT programs is essential to this area, public health IOP and partial hospital programs (PHP) are active. In IOPs and PHPs, there remains a need regarding examining outcome data---especially those that are DBT informed. (Lothes, Mochrie, & St. John, 2014).

Hope

Given hope's previous integration within clinical populations (e.g. Gilman, Schumm, & Chard, 2012) and more specifically, within a DBT program (Ritschel, Cheavens, and Nelson, 2012), it remains a logical concept used heavily in PP to integrate into DBT. Hope is a commonly referenced construct that possesses similar outcomes across psychotherapy (Ingram, Warlick, Ternes, & Krieshok, 2017). However, within psychological theory and instruments, this

positive psychology construct can be a complex concept to define. Snyder, Lopez, and Pedrotti (2003) calculated 26 hope theories in the social sciences alone. From these theories, Schrank, Stanghelilini, & Slade (2008) identified 49 definitions and 32 instruments. As a direct result of this plethora, Shrank, Woppmann, Sibitz, & Lauber (2010), classified the theories and instruments into four distinct frameworks (1) primarily emotion-based (e.g. Lazarus, 1999), (2) primarily cognition-based (e.g. Nunn, Lewin, Walton & Carr, 1996), (3) based on cognitions and emotions (e.g. Snyder, et al., 1991), and (4) from a multidimensional perspective (Herth, 1991, 1992; Miller & Powers, 1988; Schrank, 2010).

Snyder's conceptualization of hope, that it possesses goals, pathways thinking, and agentic thinking, remains a more popular conceptualization of hope in fields of education (e.g. Marques, Gallagher, & Lopez, 2017), athletics (e.g. Curry et al., 1997), psychotherapy (e.g. Irving et al., 2004), career development (e.g. Sung, Turner, & Kaewchinda, 2013), and DBT (Ritschel, Cheavens, & Nelson, 2012). Despite its applicability, Shrank et al., (2008) criticizes this model as it remains limited by only measuring perceived ability to develop pathways and the ability to motivate the self to achieve pathways. Gustafsson and Aberg-Bengtsson (2010) argue that multidimensional measures are the norm. With two dozen theories and nearly three dozen instruments, the true nature of hope may be more multidimensional than pathways and agentic thinking. Schrank and colleagues (2008) allege that there are more things in hope than are dreamt of in Snyder's theory.

In an effort to streamline the study of hope within the mental health field and also to expand past the narrower definition posited by Snyder and colleagues (1991), Shrank et al. (2008) proposed that hope had the following components: (1) "affective," which is associated with positive emotions; (2) "cognitive," which is associated with setting goals and measuring

plans, (3) "behavioural," which is associated with one's personal levels of agency; and (4) "environmental," which is associated to the individuals' ability to procure resources and relationships. Shrank et al. (2008) formulated these four components from previous models of hope (Miller, 1988; Herth, 1991, 1992, Snyder et al., 1991), and the development of the Integrated Hope Scale was derived from these components (Schrank et al., 2013). Given its integration within DBT, and its lack of data within an American clinical population, this multidimensional version of hope remains apt for exploration within a DBT population.

The Present Research

PP constructs need to be tested with clinical samples. Given their shared goals of promotion of well-being and a life worth living, as well as their traditional clinical population, DBT makes a logical environment for this integration. Also, attrition persists in community health samples; DBT emphasizes mitigating therapy-interfering behaviors, attrition being one, and Landes and colleagues (2016) called for investigating alternative predictors of dropout in an outpatient DBT program. Lastly, Schrank's conceptualization of hope needs assessed within American clinical samples. As such, this study combines these elements into assessing the integrated hope scale (IHS) alongside attrition in a DBT IOP program within a "real-world" mixed-diagnostic community health sample. The following hypotheses will be assessed:

Hypothesis 1: The factor structure of the IHS will be replicated in a mixed-diagnostic American DBT IOP program.

Hypothesis 2: Initial hope scores will possess a small relationship to graduation status in a DBT IOP program.

Hypothesis 3: There will be a statistically significant difference in hope at the last completed survey between graduation and attrition groups in a DBT IOP.

Hypothesis 4: Hope will increase across time in participants who attended DBT IOP for four or more weeks.

Methods

Participants

Ninety-five participants (Table 1) meeting criteria for a variety of mental health diagnoses (Table 2) were recruited to the study upon admittance to the Dialectical Behavior Therapy (DBT) Intensive Outpatient Program (IOP), at Bert Nash (BN), a Midwestern non-profit community health organization. Participants included 48 (50.5%) who graduated the program. The attrition rate in this sample remains consistent with the 24-58% typical range reported in other DBT community populations (Landes, Chalker, & Comtois, 2016).

As participants for this study were also clients for this program, "clients" will be used when describing general clientele of BN, including the IOP DBT program. "Participants" will be used exclusively for those individuals who agreed to participate in this study. Participants provided written informed consent prior to enrollment. Institutional Review Boards at the University of Kansas and Bert Nash both approved procedures for data collection.

For admission into the IOP program, the need for DBT IOP was determined collaboratively by the client and the referring clinician. After initial screening, the DBT Team Leader (TL) either approves or rejects the referral. Reasons for admission to the DBT IOP program are the result of symptom severity, not of presenting diagnosis. For example, some clients may be screened out because their symptom severity levels necessitate inpatient hospitalization. In other cases, a client's severity may only warrant weekly outpatient therapy. The "typical client" remains sub-acute in levels of symptom severity, not necessitating inpatient

care, and still needing more services than regular outpatient care. As such, clients in this program are a diagnostically heterogeneous group.

The Intervention

As part of orientation and commitment, each participant agreed to attend IOP and to collaborate with an individual DBT therapist. Some clients also possessed additional clinical support, such as case management. DBT IOP groups operate for 3 hours daily, 5 days per week. Each group consists of two 90-minute sessions, with a 15 minute break in-between sessions. Groups generally follow the structure of introductions, group rules, a mindfulness exercise, reporting briefly on skill use from a client's diary card, and teaching of the psychoeducational material. These groups are adapted from Linehan's original skills training manual (1993b). Adaptations have occurred as the result of other recent updates in the DBT literature (i.e. Linehan, 2014; Miller, Rathus, & Landsman, 1999). Once weekly, participants complete a survey including the hope scale described below; demographics were collected via chart review. Client records and consultation with individual therapists confirmed a participant's graduation status.

Measures

Integrated Hope Scale (IHS, Schrank et al., 2011; Appendix A) is a 23-item instrument derived from items listed on three other hope measures (Herth 1992; Miller & Powers, 1988; Synder et al., 1991). These items were identified by exploratory factor analysis (EFA) using an Austrian general population sample (Schrank et al., 2011). Four factors were selected, Trust and confidence (TC), lack of perspective (LP), positive future orientation (PFO), and social relations and personal value (SRPV). LP is reverse scored. The factor structure was confirmed using confirmatory factor analysis (CFA) in an Austrian clinical sample with persons with psychosis

(Schrank et al., 2012). Ingram and colleagues (2017) extended validity of the IHS using factor analysis with a regionally and racially diverse American collegiate student sample. Additionally, the scale's factor structure has also been replicated in a Canadian general population sample (Sharpe, McElheran, & Whelton, 2017).

Items in the final version of the IHS are scored on a 6-point Likert-type scale (1= Strongly Disagree 6=Strongly Agree). The IHS demonstrated good internal reliability (overall score $\alpha = .92$, as well as factor coefficient alphas ranging from .80 to .85). Convergent and divergent validity evidence exists regarding negative correlations between IHS scores and depression (Schrank et al., 2012) and positive correlations with IHS scores and quality of life (Schrank et al., 2011). Test-retest reliability has been established at .83 for the total score and between .71 and .83 for the four factor scores (Schrank et al., 2012).

The Demographic Data Schedule (DDS; Linehan, 1994; Appendix B) is a 69-item unpublished demographic form, primarily comprised of 19 central questions from the Behavioral Research and Therapy Clinics at the University of Washington. This form was adapted for brevity, for scope, and for the typical clientele of the DBT IOP program. Emphasis has been placed on identified race and ethnicity, identified gender, age, and identified religion or spirituality.

Graduation Status

Attrition was measured according to DBT IOP standard operating procedures. This differs from the definition of dropout in standard DBT. In standard DBT, dropout occurs when a client misses four consecutive sessions of any one aspect of treatment (e.g. skills group; Linehan, 1993). While this definition remains incorporated into decision-making at BN, it is not the sole criterion. At BN, either a participant will graduate from the program, or they will be classified as

a non-graduate, and thus, part of the attrition rate. There is no "set" date, or minimum number of sessions, for graduation; rather graduation remains a collaborative decision between the client, the individual DBT therapist, and the DBT TL. While each case is unique, graduation largely occurs when the client longer needs the intensive services of DBT IOP.

Results

Hypothesis #1: The factor structure of the IHS will be replicated in a mixed-diagnostic American DBT IOP program.

This hypothesis was rejected based on evidence from an exploratory factor analysis (EFA). Previous validations of the IHS occurred using a European general population sample, (Schrank et al., 2011), a European sample of persons with psychosis (Schrank et al., 2012), an American collegiate student sample (Ingram, et al., 2017), and a Canadian general population sample (Sharpe, et al., 2017). Given that none of these samples have previously used an American clinical population or a mixed-diagnostic population, EFA was used to explore the factor structure of the IHS, rather than CFA.

The EFA analysis included the first IHS from every participant. The dimensionality of the 23 items from the IHS was analyzed using Varimax rotation. Green and Salkind's (2014) criteria determined the number of factors to rotate. The rotated solution, shown in Table 3, yielded four interpretable factors: Secure hope (SH), Affective hope (reverse scored; AH), Interpersonal hope (IH), and Cognitive hope (CH). In every analysis, all reverse scored items have been reversed; their numbers indicate the positive direction. Percentage of variance explained ranges from 26.9% (Factor 1) to 5.25% (Factor 4) for a total of 63.33% of the variance explained.

Using the factor matrix as the only guide, SH possessed 13 items, AH possessed 6 items, IH possessed 3 items, and CH possessed 1 item. By including cross-loadings, theoretical, and psychometric considerations, the following occurred:

1) Item 5 ("Even when others get discouraged, I know I can find a way to solve the problem") shifted to Factor 4 (CH) for as this item loads second highest on that factor and it fits for theoretically consistent reasons
2) Item 20 ("I am valued for what I am") shifted to Factor 3 (IH) for validity and statistical reasons as it loads almost similarly (.6 vs 0.5) and for theoretical reasons (it focuses on affective feelings).
3) Item 21 ("My past experiences have prepared me well for the future") shifted to Factor 4 (CH) for validity and statistical reasons as it loads second highest on this factor and it fits with content of cognitively managing difficulties.

These changes are showcased in Table 4. After items for the subscales had been finalized, reliability was calculated. Reliability analysis of the new scales indicates near acceptable to excellent reliability for each subscale as determined by Devellis' criteria, (2012; 0.78-0.91,Table 4). While α levels for IH (0.79) and CH (0.78) are lower than their counterparts, one explanation may be the reduced number of items (4 for IH and 3 for CH) compared to the other subscales (10 for SH, 6 for AH). Reliability for the initial subscales indicated similar internal consistency as the new subscales (PFO = 0.78, SRPV = 0.79, LP = 0.84, TC = 0.90). Exploring the factor structure of the IHS with this new population revealed a differing factor structure than the one found by Schrank and colleagues (2011) and confirmed by others. As these subscales demonstrated reliability, follow-up analyses used the subscales found here (IHS-Adapted) as opposed to the subscales used in Schrank's original measure.

Hypothesis #2: Initial hope scores will possess a small relationship to graduation status in a DBT IOP program.

This hypothesis was rejected. A logistic regression was used to predict group membership, graduate or drop-out, in a DBT population (*n*=95, 48 graduates, 50.5%). Total hope score and subscale scores recorded at entry served as predictor variables; group status (graduate or attrition) served as the criterion variable. The Omnibus Test of Model Coefficients ($\chi^2(4) = 2.83$, $p = .59$) did not support the model. This indicates that using hope to predict graduate or non-graduate status in this sample did not significantly increase the model over random prediction.

Hypothesis #3: There will be a statistically significant difference in hope at the last completed survey between graduation and attrition groups.

This hypothesis was rejected. To assess this hypothesis, a multivariate analysis of variance (MANOVA) was conducted to determine the effect of the subscales from the last completed IHS, whether prior to graduation or prior to dropping out, served as dependent variables, and group status served as the independent variable. Significant differences were not found on the new four subscales of hope on graduation status. Wilks Lambda = .96 $F(4, 90) = 0.88$, $p < .48$. The partial eta squared was quite weak, .04. As a result of the nonsignificant Wilks Lambda, there were no follow-up tests to the MANOVA. Table 5 contains the means and standard deviations of the dependent variables for the three groups. These results indicate that there were no significant differences between the graduate group and the non-graduate group related to the four subscales of hope as assessed in each participant's last session.

Additionally, an independent-samples t-test was conducted to determine whether the total hope score was different in participants who graduated as opposed to participants who did not

graduate. Levene's test was significant (0.03), which indicates that homoscedasticity was violated. The variance for the two groups were unequal. The t-test for unequal variances, $t(46.32) = -1.37$, $p = .18$, is non-significant.

Hypothesis #4: Hope will increase across time in participants who attended DBT IOP for four or more weeks.

This hypothesis was also rejected. A one-way MANOVA was conducted to determine the effect of the new four subscales of hope on the dependent variable of time in DBT. As orientation paperwork for the DBT IOP program suggests clients expect to stay for roughly four weeks in the program. As such, participants with less than four weeks of participation were excluded from the study to ensure participants' adequate exposure to the DBT IOP program.

Significant differences were not found on the new four subscales of hope on time in DBT ($n = 33$). Wilks Lambda = .93 $F(4, 61) = 1.17$, $p < .33$. The partial eta squared was quite weak, .74. As a result of the nonsignificant Wilks Lambda, there were no follow-up tests to the MANOVA. Table 6 contains the means and standard deviations of the dependent variables for the two sets of assessments. Additionally, an independent-samples t-test was conducted to determine the effect of total hope across time. This test was non-significant, $t(64) = -1.15$, $p = .25$. These results indicate that there were no significant differences between the entry and exit scores for individuals who attended at least 4 sessions of DBT related to the four subscales of hope, or the total hope score.

These results indicate that the factor structure of the IHS remains unique for an American mixed-diagnostic clinical population. Additionally, hope was 1) unable to solely predict graduation status at entry, 2) unable to distinguish between graduate and non-graduate populations at exit, and 3) did not increase significantly during time in DBT.

Discussion

This study examined the role of the hope in attrition in a mixed-diagnostic brief, DBT IOP program at a community mental health center. There remain five notable findings for researchers and for clinicians. The first finding demonstrates that the underlying factor structure of a multidimensional measure of hope, the IHS, is unique among an American mixed-diagnostic population. This adds another level of complexity to the definition and conceptualization of hope. The factor structure here did provide a good reliable total score, and near acceptable to excellent reliability in the subscales according to criteria established by Devellis (2012). There is additional potential for the 10-item SH subscale as its reliability exceeds its counterparts (0.91), it explains more variance (26.93%), and it approached significance regarding distinguishing between graduating and non-graduating groups at exit (.08). Given its reliable nature, the IHS-Adapted, and specifically the SH subscale, remains apt for future exploration with American mixed diagnostic clinical samples.

The second finding of note remains that hope did not solely predict graduation status at entry. This possesses important clinical implications. Frank and Frank (1991) detail that a clinician's job involves collaborating with a client who is suffering and helping restore them to a greater level of functioning. The finding here suggests that regardless of how hopeful, or how hopeless, this suffering client experiences, hope does not predict graduation or attrition better than random chance. It provides further importance for the old adage of meeting *all* "clients where they are" upon orientation and commitment to therapy. Regarding research, it remains essential to better identify symptoms and strengths that may help clients complete therapy, specifically as DBT is a strengths-based model (Sakdalan, Shaw, & Collier, 2010).

The third finding, regarding hope not distinguishing between graduate and non-graduate groups, provides more questions than answers. One hypothesis could be that hope is much more trait than state (e.g. Snyder et al., 1996) and that individuals who have experienced a level of suffering that necessitates DBT IOP may be consistently similar across time. A second hypothesis relates to the amount of time spent in DBT IOP. Skills-training has shown to be an important component of DBT (Linehan, et al., 2015). Briefer interventions of skills training and DBT have shown increases in functioning and decreases in self-harm, and they also remain significantly longer than the average stay in this program (e.g. McMain, Guimond, Barnhart, Habinski, & Streiner, 2017 lasted 20 weeks, Gratz & Gunderson, 2005 lasted 14 weeks focusing on emotional regulation, Soler et al. 2009, lasted 13 weeks, Rizvi & Steffel, 2014 lasted 8 weeks). Lastly, it may just be that graduation or non-graduate status does not matter regarding hope. Future research should follow the call postulated by Rizvi and colleagues (2017), and this foray, and focus on how even briefer DBT interventions relate to outcomes.

A fourth finding, that hope did not increase during time in DBT for those participants who participated in four or more sessions, contrasts with the findings of Ritschel, Cheavens, and Nelson (2012). While Ritschel and colleagues conceptualized hope from Snyder's perspective (Snyder et al., 1991), this still remains surprising as clinician perspective suggests hope in this program increases as a result of 1) building skills to help manage life, 2) the interpersonal support provided by the individual therapist and skills group leaders, as well as 3) the universality of the group. Additionally, the multidimensional measure of hope used in this study may require a longer period of DBT to change significantly, as opposed to the cognitive changes more readily measured by Snyder's Adult Hope Scale. Additionally, detection of changes in hope may be better measured using Snyder's State Hope Scale given the differentiation between

dispositional hope, which applies to people across time, and state hope, which focuses as more of a temporal state of thinking (Snyder et al., 1996).

The final implication relates to assessing a positive psychology construct within DBT. Positive psychology remains vulnerable to criticism given a lack of data regarding its constructs within populations that meet clinical criteria for suffering. Despite the nonsignificant relationship between hope and graduation, this study remains an important step regarding increasing the validity of positive psychology past more privileged samples. Further research needs to occur using other positive psychology constructs in the treatment of individuals who meet criteria for clinical diagnoses.

This study is significant as it 1) finds that the IHS possesses a unique factor structure in a mixed-diagnostic American clinical population, 2) discerns that hope cannot solely predict graduation status at entry, providing additional evidence to "meet clients where they are," 3) provides evidence that hope does not distinguish between graduate and non-graduate groups at exit, 4) it assesses the outcome of program completion in a very brief DBT program in a community health population, and 5) the study successfully integrates a prominent positive psychology construct within a diagnostically diverse clinical sample.

Limitations and Future Directions

Given the uniqueness of this population regarding the IHS, EFA was deemed a more appropriate analysis than CFA. Future research on the IHS-Adapted would benefit from using CFA to provide additional information regarding the structure of this adapted instrument. Additionally, while the IHS possesses a multidimensional conceptualization of hope, additional conceptualizations of hope may provide additional validity to the findings here. Subsequently, while this population remains diverse in terms of diagnosis, it remains limited in terms of gender

and race and ethnicity. However, the biggest limitation is the lack of a control sample. In addition to addressing these limitations, future research should also address the significant dearth of literature regarding the intersection of DBT and positive psychology, specifically in brief DBT community health programs. Strengthening findings on this gap may strengthen both positive psychology and DBT. Despite these limitations, this study still retains importance in the fields of positive psychology and DBT for 1) elucidating additional information regarding the factor structure of the IHS in a mixed-diagnostic American clinical population, and 2) integrating a common positive psychology component in a unique, yet-real world environment, a diagnostically diverse brief DBT sample.

References

Chugani, C. D., Mitchell, M. E., Botanov, Y., & Linehan, M. M. (2017). Development and Initial Evaluation of the Psychometric Properties of the Dialectical Behavior Therapy Barriers to Implementation Scale (BTI-S). *Journal of Clinical Psychology*.

Comtois, K. A., Elwood, L., Holdcraft, L. C., Smith, W. R., & Simpson, T. L. (2007). Effectiveness of dialectical behavior therapy in a community mental health center. *Cognitive and Behavioral Practice*, *14*(4), 406-414.

Curry, L. A., Snyder, C. R., Cook, D. L., Ruby, B. C., & Rehm, M. (1997). The role of hope in student-athlete academic and sport achievement. *Journal of Personality and Social Psychology*, 73, 1257–1267.

DeVellis, R.F. (2012). *Scale development: Theory and applications*. Los Angeles: Sage. pp. 109–110.

Gustafsson, J-E., & Aberg-Bengtsson, L. (2010). Unidimensionality and interpretability of psychological instruments. In S. E. Embretson (Ed.), Measuring psychological constructs: Advances in model-based approaches (pp. 97-121). Washington, DC: American Psychological Association.

Gratz, K. L., & Gunderson, J. G. (2006). Preliminary data on an acceptance-based emotion regulation group intervention for deliberate self-harm among women with borderline personality disorder. *Behavior Therapy*, *37*(1), 25-35.

Green, S.B., & Salkind, N.J. (2014). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (7th ed.). Boston: Pearson.

Herth, K. (1991) Development and refinement of an instrument to measure hope. *Scholarly Inquiry for Nursing Practice An International Journal 5*(1), 39-51.

Herth, K. (1992). Abbreviated instrument to measure hope: development and psychometric evaluation. *Journal of Advanced Nursing, 17,* 1251–1259.

Ingram, P. B., Warlick, C. A., Ternes, M. S., & Krieshok, T. S. (2017). Examining the feasibility of the integrated hope scale in American college students. *Counselling Psychology Quarterly*, 1-17.

Irving, L. M., Snyder, C. R., Cheavens, J., Gravel, L., Hanke, J., Hilberg, P., & Nelson, N. (2004). The Relationships between hope and outcomes at the pretreatment, beginning, and later phases of psychotherapy. *Journal of Psychotherapy Integration*, *14*(4), 419.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: IL: The University of Chicago Press.

Landes, S. J., Chalker, S. A., & Comtois, K. A. (2016). Predicting dropout in outpatient dialectical behavior therapy with patients with borderline personality disorder receiving psychiatric disability. *Borderline Personality Disorder and Emotion Dysregulation*, *3*(9).

Lazarus, R. S. (1999). Hope: An emotion and a vital coping resource against despair. *Social Research*, 653-678.

Linehan, M.M. (1993). Cognitive behavioral therapy of borderline personality disorder. New Yor: Guilford Press.

Linehan, M.M. (1993b). Skills training manual for treating borderline personality disorder. New York: Guilford Press.

Linehan, M.M. (2016a). Peer-reviewed & published randomized controlled/comparative trials. Retrieved April 15, 2017 from http://www.linehaninstitute.org/downloads/RCT4ModesResearchDatatoDate2016.06.28.pdf.

Linehan, M.M. (2016b). Skills-only peer-reviewed & published randomized controlled/comparative trials. Retrieved April 15, 2017 from http://www.linehaninstitute.org/downloads/RCTSkills-onlyResearchtoDate2016.06.28.pdf

Linehan, M.M. (1994). Unpublished measure, University of Washington. http://blogs.uw.edu/brtc/publications-assessment-instruments/

Linehan, M. M., Korslund, K. E., Harned, M. S., Gallop, R. J., Lungu, A., Neacsiu, A. D., ... & Murray-Gregory, A. M. (2015). Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder: a randomized clinical trial and component analysis. *JAMA Psychiatry*, *72*(5), 475-482.

Linley, P.A., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, *1*(1), 3-16.

Marques, S. C., Gallagher, M. W., & Lopez, S. J. (2017). Hope and academic-related outcomes: A meta-analysis. *School Mental Health*, 1-13.

McMain, S. F., Guimond, T., Barnhart, R., Habinski, L., & Streiner, D. L. (2017). A randomized trial of brief dialectical behaviour therapy skills training in suicidal patients suffering from borderline disorder. *Acta Psychiatrica Scandinavica*, *135*(2), 138-148.

Miller, A.L., Rathus, J.H., Landsman, M., & Linehan, M.M. (1999). *DBT skills training manual for suicidal adolescents*. Unpublished manual. Montefiore Medical Center /Albert Einstein College of Medicine, Bronx, NY.

Miller, J.F. (1986). Development of an instrument to measure hope. (Unpublished doctoral dissertation). University of Illinois at Chicago, Chicago, IL.

Miller J.F., Powers M.J. (1988). Development of an instrument to measure hope. *Nursing Research. 37,* 6–10.

Nunn, K. P., Lewin, T. J., Walton, J. M., & Carr, V. J. (1996). The construction and characteristics of an instrument to measure personal hopefulness. *Psychological Medicine*, *26*(03), 531-545.

Pasieczny, N., & Connor, J. (2011). The effectiveness of dialectical behaviour therapy in routine public mental health settings: An Australian controlled trial. *Behaviour Research and Therapy*, *49*(1), 4-10.

Ritschel, L. A., Cheavens, J. S., & Nelson, J. (2012). Dialectical behavior therapy in an intensive outpatient program with a mixed-diagnostic sample. *Journal of Clinical Psychology*, *68*(3), 221-235.

Rizvi, S. L., & Steffel, L. M. (2014). A pilot study of 2 brief forms of dialectical behavior therapy skills training for emotion dysregulation in college students. *Journal of American College Health*, *62*(6), 434-439.

Rizvi, S. L., Hughes, C. D., Hittman, A. D., & Vieira Oliveira, P. (2017). Can trainees effectively deliver Dialectical Behavior Therapy for individuals with borderline personality disorder? Outcomes from a training clinic. *Journal of Clinical Psychology*.

Sakdalan, J. A., Shaw, J., & Collier, V. (2010). Staying in the here-and-now: A pilot study on the use of dialectical behaviour therapy group skills training for forensic clients with intellectual disability. *Journal of Intellectual Disability Research*, *54*(6), 568-572.

Schrank, B., Amering, M., Hay, A. G., Weber, M., & Sibitz, I. (2014). Insight, positive and negative symptoms, hope, depression and self-stigma: A comprehensive model of mutual

influences in schizophrenia spectrum disorders. *Epidemiology and Psychiatric Sciences*, 23, 271-279. doi:10.1017/S2045796013000322

Schrank, B., Bird, V., Rudnick, A., Slade, M., (2012). Determinants, self-management strategies and interventions for hope in people with mental disorders: systematic search and narrative review. *Social Science & Medicine 74*, 554–564.

Schrank, B., Woppmann, A., Hay, A. G., Sibitz, I., Zehetmayer, S., & Lauber, C. (2012). Validation of the Integrative Hope Scale in people with psychosis. *Psychiatry Research*, 198, 395-399. doi:10.1016/j.psychres.2011.12.052

Schrank, B., Woppmann, A., Sibitz, I., Lauber, C., (2011). Development and validation of an integrative scale to assess hope. *Health Expectations. 1*, 417–428.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.

Seligman, M. E., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist*, *61*(8), 774.

Sharpe, D., McElheran, J., & Whelton, W. J. (2017). Assessing the Factor Structure of the Integrative Hope Scale. *Assessment*, 1073191117700269.

Sung, Y., Turner, S. L., & Kaewchinda, M. (2013). Career development skills, outcomes, and hope among college students. *Journal of Career Development*, *40*(2), 127-145.

Wood, A. M., & Tarrier, N. (2010). Positive clinical psychology: A new vision and strategy for integrated research and practice. *Clinical Psychology Review*, *30*(7), 819-829.

Appendix A

Study Tables

Table 1
Descriptive Statistics of Participants

Category	Percentage
Gender	
Female	63.2 %
Male	32.6 %
Trans	4.2 %
Ethnicity	
African-American/Black	5.3 %
American Indian/Native American	3.2%
Asian-American/Asian	2.1%
Arab-American/Arab	1.1%
Caucasian/White	83.2%
Other/Unknown	5.3 %
Met Criteria for SPMI/SMI	
Yes	48.4 %
No	51.6 %
Primary Substance	
Met criteria for substance diagnosis	32.6%
Alcohol	14.7%
Marijuana	8.4%
Sedative, hypnotic, anxiolytic	3.2%
Opioid	2.1%
Methamphetamine	3.2%
Cocaine/Crack	1.1%
Other	
Secondary Substance	
Met criteria for secondary diagnosis	7.5%
Alcohol	3.2%
Marijuana	3.2%
Opioid	1.1%

Table 2
Diagnostic Information of Participants

Primary Diagnosis	
Borderline Personality Disorder	5.3%
Major Depressive Disorder	37.9%
Posttraumatic Stress Disorder	15.8%
Bipolar Type I	16.8%
Bipolar Type II	3.2%
Generalized Anxiety Disorder	9.5%
Persistent Depressive Disorder	1.1%
Other	10.4%

Secondary Diagnosis	
Met criteria for second diagnosis	57.9%
Borderline Personality Disorder	12.6%
Major Depressive Disorder	11.6%
Posttraumatic Stress Disorder	13.7%
Bipolar Type I	2.1%
Generalized Anxiety Disorder	6.3%
Attention Deficit Disorder	6.3%
Bulimia	1.1%
Other	4.2%

Tertiary Diagnosis	
Met criteria for additional diagnosis	19.2%
Borderline Personality Disorder	3.2%
Major Depressive Disorder	1.1%
Posttraumatic Stress Disorder	1.1%
Panic Disorder	1.1%
Attention Deficit Disorder	9.5%
Other	3.2%

Table 3
Initial Rotated Solution Factor Loadings for the Integrated Hope Scale - Adapted

Item	Original Factor*	I	II	III	IV
1.	1, SH	.69	.05	.09	.04
2.	2, AH	.03	.84	-.26	.00
3.	1, SH	.39	-.07	.26	-.05
4.	3, IH	.33	.01	.69	.06
5.	1, SH	.71	-.03	-.07	.25
6.	2, AH	.08	.19	.03	-.10
7.	1, SH	.70	.03	.20	.15
8.	1, SH	.72	-.06	.37	.05
9.	1, SH	.71	-.02	.42	.01
10.	2, AH	-.13	.78	-.01	.11
11.	3, IH	.24	-.18	.58	-.05
12.	1, SH	.75	-.07	.14	-.03
13.	2, AH	-.12	.85	.04	.15
14.	3, IH	.45	.07	.47	.27
15.	1, SH	.77	.04	.32	.09
16.	2, AH	-.07	.74	.09	-.16
17.	1, SH	.62	-.06	.23	.10
18.	4, CH	.41	-.03	.07	.91
19.	2, AH	.03	.80	-.11	.02
20.	1, SH	.61	.02	.52	.13
21.	1, SH	.66	.12	.27	.31
22.	1, SH	.57	.04	.44	-.06
23.	1, SH	.56	-.15	.12	-.02

Notes: SH = Secure Hope, AH = Affective Hope, IH = Interpersonal Hope, CH = Cognitive Hope. *Indicates Original Factor for the IHS-Adapted

Table 4
Final Instrument and Factor Loadings

Item	SH	AH	IH	CH
1. Have deep inner strength	.69			
3. Things I want to do in life	.39			
7. Have sense of direction	.70			
8. Look forward to doing things I enjoy	.72			
9. Believe each day has potential	.71			
12. See possibilities in midst of difficulties	.75			
15. Feel my life has value and worth	.77			
17. Make plans for my future	.62			
22. Intend to make most of life	.57			
23. Have faith that gives me comfort	.56			
2. Hard to keep up interest		.84		
6. Seems all support has been withdrawn		.19		
10. Troubles prevent future plans		.78		
13. Feel hopeless about parts of life		.85		
16. Feel trapped, pinned down		.74		
19. Feel uninvolved in life		.80		
4. Feel loved			.69	
11. Have someone who shares concerns			.58	
14. Needed by others			.47	
20*. Valued for what I am			.52	
5*. Know I can solve the problem				.25
18. Pretty successful in life				.91
21*. Past prepared well for future				.31
Reliability: α .= 88	.91	.84	.79	.78

Notes: SH = Secure Hope, AH = Affective Hope, IH = Interpersonal Hope, CH = Cognitive Hope. *Indicates this item is placed on a different subscale than after initial rotation.

Table 5
Mean and Standard Deviation at Last Survey

Subscale	Graduate (*n*=49) *M*(SD)	Non-graduate (*n*=46) *M*(SD)
Secure Hope (SH)	42.33 (10.03)	38.50 (11.45)
Affective Hope (AH)	21.16 (7.25)	20.59 (7.03)
Interpersonal Hope (IH)	16.55 (4.25)	15.63 (4.82)
Cognitive Hope (CH)	11.29 (3.32)	10.09 (4.11)

Table 6
Mean and Standard Deviation between entry and exit survey

Subscale	Entry (*n*=33) *M*(SD)	Exit(*n*=33) *M*(SD)
Secure Hope (SH)	37.45 (11.36)	40.58 (11.90)
Affective Hope (AH)	19.21 (7.87)	20.12 (7.07)
Interpersonal Hope (IH)	14.39 (4.18)	16.15 (4.86)
Cognitive Hope (CH)	10.64 (3.64)	10.64 (3.65)

Appendix B

Integrated Hope Scale

The subscale abbreviation is listed in parentheses (Trust and Confidence = TC, Positive Future Orientation = PFO, Lack of Perspective = LP, and Social Relations and Personal Value = SRPV)

Instructions: Please indicate how much you agree or disagree with each of these statements utilizing the scale ranging from 1-Strongly disagree to 6-Strongly agree.

1 I have deep inner strength (TC)
2 It is hard for me to keep my interest in activities I used to enjoy (LP)
3 There are things I want to do in life (PFO)
4 I feel loved (SRPV)
5 Even when others get discouraged, I know I can find a way to solve the problem (TC)
6 It seems as though all my support has been withdrawn (LP)
7 I have a sense of direction (TC)
8 I look forward to doing things I enjoy (PFO)
9 I believe that each day has potential (TC)
10 I am bothered by troubles that prevent my planning for the future (LP)
11 I have someone who shares my concerns (SRPV)
12 I can see possibilities in the midst of difficulties (TC)
13 I am hopeless about some parts of my life (LP)
14 I am needed by others (SRPV)
15 I feel my life has values and worth (TC)
16 I feel trapped, pinned down (LP)
17 I make plans for my own future (PFO)
18 I've been pretty successful in life (TC)
19 I find myself becoming uninvolved with most things in life (LP)
20 I am valued for what I am (SRPV)
21 My past experiences have prepared me well for my future (TC)
22 I intend to make the most of life (PFO)
23 I have a faith that gives me comfort (TC)

Appendix C

Integrated Hope Scale – Adapted

The subscale abbreviations according to the underlying factor structure in this sample is listed in parentheses (Secure hope = SH, Affective hope = reverse scored; AH, Interpersonal hope = IH, and Cognitive Hope = CH)

Instructions: Please indicate how much you agree or disagree with each of these statements utilizing the scale ranging from 1-Strongly disagree to 6-Strongly agree.

1 I have deep inner strength (SH)
2 It is hard for me to keep my interest in activities I used to enjoy (AH)
3 There are things I want to do in life (SH)
4 I feel loved (IH)
5 Even when others get discouraged, I know I can find a way to solve the problem (CH)
6 It seems as though all my support has been withdrawn (AH)
7 I have a sense of direction (SH)
8 I look forward to doing things I enjoy (SH)
9 I believe that each day has potential (SH)
10 I am bothered by troubles that prevent my planning for the future (AH)
11.I have someone who shares my concerns (IH)
12 I can see possibilities in the midst of difficulties (SH)
13 I am hopeless about some parts of my life (AH)
14 I am needed by others (IH)
15 I feel my life has values and worth (SH)
16 I feel trapped, pinned down (AH)
17 I make plans for my own future (SH)
18 I've been pretty successful in life CH)
19 I find myself becoming uninvolved with most things in life (AH)
20 I am valued for what I am (IH)
21 My past experiences have prepared me well for my future (CH)
22 I intend to make the most of life (SH)
23 I have a faith that gives me comfort (SH)

Appendix D

Demographics derived from DDS:

What is your identified age? _____

Please enter the number that best describes your identified race/ethnicity?

0 = White/.Caucasian
1 = Native American/American Indian or Eskimo
2 = Black/African-American
3 = Chinese or Chinese-American
4 = Other Asian or Asian American
5 = Hispanic/Latina/o
6 = International please specify_____
7 = Other, please specify _____

Please enter the number that best describes your identified gender? _____

0 = Male
1 = Female
2 = Trans*
3 = Other (please specify) _____

Please enter the number that best describes your identified sexuality? _____

0 = Heterosexual
1 = Homosexual
2 = Bisexual
3 = Asexual
4 = Other (please specify) _____

Please enter the number that best describes what religion did you grow up practicing?

0 = Protestantism (please specify denomination) _____
1 = Catholicism
2 = Judaism
3 = Islam
4 = Hindu
5 = Buddhism
6 = Agnosticism or Atheism
7 = Other (please specify) _____
8 = None

Please enter the number that best describes what religion do you currently practice?

0 = Protestantism (please specify denomination) _____
1 = Catholicism
2 = Judaism
3 = Islam
4 = Hindu
5 = Buddhism
6 = Agnosticism or Atheism
7 = Other (please specify) _____
8 = None

Please enter the number that best describes your education level: _____

0 = 8th grade or less
1 = some high school
2 = GED/high school graduate
3 = business or technical training beyond high school
4 = some college
5 = college graduate
6 = some graduate or professional school beyond college
7 = masters degree
8 = doctoral degree

Please enter the number that best describes whether or not you have previously attempted to complete suicide:____

0 = No
1= Yes

Please enter the number that best describes whether or not you have previously engaged in non-suicidal self-injury behaviors (NSSI): _____

0 = No
1 = Yes

Please enter the number that best describes whether or not you have previously been in treatment for psychological or psychiatric services before: _____

0 = No
1 = Yes

Please enter the number that best describes whether or not you have previously been hospitalized before as a result of being classified as a danger to yourself or being classified as a danger to someone else_____

0 = No
1 = Yes

Please enter the number that best describes whether or not you have previously been in treatment at Bert Nash in the Intensive Outpatient Program (IOP)_____

0 = No
1 = Yes

Appendix E

Continuing Review Protocol

APPROVAL OF PROTOCOL

March 23, 2017
Craig Warlick
c981w725@kumc.edu

Dear Craig Warlick:
On 3/23/2017, the IRB reviewed the following submission:
Type of Review: Continuing Review

Title of Study: The nature and outcomes of clients in a dialectical behavior therapy intensive outpatient program
Investigator: Craig Warlick
IRB ID: STUDY00002153
Funding: None
Grant ID: None
Documents Reviewed: • Informed_Consent_BN_Study_KU_Data_Only_2015_04_16.docx, • BN_Study_HSCL_Initial_Submission_Form v10_2015_04_14.pdf
The IRB approved the study from 3/23/2017 to 4/16/2018.
1. Before 4/16/2018 submit a Continuing Review request and required attachments to request continuing approval or closure.
2. Any significant change to the protocol requires a modification approval prior to altering the project.
3. Notify HSCL about any new investigators not named in original application. Note that new investigators must take the online tutorial at https://rgs.drupal.ku.edu/human_subjects_compliance_training.
4. Any injury to a subject because of the research procedure must be reported immediately.
5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.
If continuing review approval is not granted before the expiration date of 4/16/2018 approval of this protocol expires on that date.
Please note university data security and handling requirements for your project: https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm
You must use the final, watermarked version of the consent form, available under the "Documents" tab in eCompliance.

Sincerely,

Stephanie Dyson Elms, MPA
IRB Administrator, KU Lawrence Campus

Appendix F

Initial Review
APPROVAL OF PROTOCOL
March 23, 2017
Craig Warlick
c981w725@kumc.edu
Dear Craig Warlick:
On 3/23/2017, the IRB reviewed the following submission:
Type of Review: Continuing Review
Title of Study: The nature and outcomes of clients in a dialectical behavior therapy intensive outpatient program
Investigator: Craig Warlick
IRB ID: STUDY00002153
Funding: None
Grant ID: None
Documents Reviewed: • Informed_Consent_BN_Study_KU_Data_Only_2015_04_16.docx, • BN_Study_HSCL_Initial_Submission_Form v10_2015_04_14.pdf
The IRB approved the study from 3/23/2017 to 4/16/2018.

1. Before 4/16/2018 submit a Continuing Review request and required attachments to request continuing approval or closure.
2. Any significant change to the protocol requires a modification approval prior to altering the project.
3. Notify HSCL about any new investigators not named in original application. Note that new investigators must take the online tutorial at https://rgs.drupal.ku.edu/human_subjects_compliance_training.
4. Any injury to a subject because of the research procedure must be reported immediately.
5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.

If continuing review approval is not granted before the expiration date of 4/16/2018 approval of this protocol expires on that date.
Please note university data security and handling requirements for your project: https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm
You must use the final, watermarked version of the consent form, available under the "Documents" tab in eCompliance.

Sincerely,

Stephanie Dyson Elms, MPA
IRB Administrator, KU Lawrence Campus