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Examining the Clinical Efficacy of Core Transformation: A Randomized Clinical Trial

Dinesh J. Braganza, Ralph L. Piedmont, Jesse Fox, Geraldine M. Fialkowski, and Richard M. Gray

This randomized clinical trial with a sample of adults (N = 129) from India explored the effects of a single core-transformation session on symptom experience and psychological growth. The results over the total 8-week study period indicated significant, moderate overall effect sizes (ds = 0.63 and 0.52) for symptom experience, emotional stability, affect balance, global well-being, and purpose in life. Implications for research and clinical practice are discussed.

Keywords: core transformation, symptom experience, emotional stability, positive affect, purpose in life

Core transformation (CT) is a manualized approach to therapy that acknowledges the *positive intention* underlying all behavior (Andreas & Andreas, 1996). CT accesses the organismic, goal-oriented motivation toward coherence (Emmons, 1999; Emmons, Cheung, & Tehrani, 1998) to reframe experiences and transform dysfunction. For example, if one is angry, CT will search to find the positive intention behind this, such as a need to feel protected. If one is ashamed, the underlying motivation may be a need for support or encouragement. In order to access deeper outcomes, the following question is posed recursively: "What does this part of you want through this behavior (or intermediate outcome) that is deeper or more important?" Through the repeated questioning of intermediate outcomes, in this manner, CT accesses ever deeper levels of motivation, which ultimately open into the experience of deep, encompassing core states, such as being, inner peace, love, OK-ness, and oneness (Andreas & Andreas, 1994). By accessing these core states—which underlie all, and especially problematic, behaviors—people obtain a larger and more encompassing sense of who they truly are. In this process, clients achieve a greater awareness of deeper levels of motivation and personal direction. In addition, more resourceful states are accessed that allow the client greater freedom in dealing with the situations in which the problem behaviors earlier occurred (Andreas & Andreas, 1996). It may be important to stress at this stage that the CT process is not spiritual, per se; it requires no religious beliefs and neither claims to access something called spiritual nor acknowledges the involvement of so-called spiritual entities. It is a counseling process that leads clients to experience something that they may identify as spiritual; however, CT itself makes no such claim. Miller's (2004) quantum change theory described states that engender instantaneous maturation or self-actualization. CT appears to access such transforming states that effect inner coherence (Emmons, 1999) through a step-by-step process. The next section explores CT within the larger framework of counseling theories.

Theoretical Framework

Humanistic Psychotherapy and CT

Andreas and Andreas (1996) stated that CT grew out of their clinical work with clients and helped them to make breakthroughs in areas that were resistant to change. CT can be situated within the humanistic–experiential and cognitive–behavioral theoretical frameworks of counseling theory. Angus, Watson, Elliott, Schneider, and Timulak (2015) outlined the four key theoretical constructs that mark humanistic–experiential psychotherapy. These include the primacy of the therapeutic relationship, along with in-therapy attention to present-moment experiencing; recognition of the adaptive and growth-oriented nature of the person; and recognition that

Dinesh J. Braganza, Ralph L. Piedmont, Jesse Fox, and **Geraldine M. Fialkowski,** College of Arts and Sciences, Loyola University Maryland; **Richard M. Gray,** School of Criminal Justice, Fairleigh Dickinson University (retired). Dinesh J. Braganza is now at Jnana-Deepa Vidyapeeth, Pontifical Institute of Philosophy and Religion, Pune, India. Ralph L. Piedmont is now at Center for Professional Studies, Timonium, Maryland. Jesse Fox is now at Department of Counselor Education, Stetson University. Geraldine M. Fialkowski is now retired and a consultant. Richard M. Gray is now at Research and Recognition Project, Corning, New York. Correspondence concerning this article should be addressed to Dinesh J. Braganza at dineshbsj@gmail.com or dinesh.braganza@jdv.edu.in.

the person may have symptoms, but can never be reduced to diagnostic categories. Bohart and Watson (2011) explained that Rogers's humanistic, person-centered approach places the emphasis on the client—that is, on the client's knowledge of what to focus on, what the key issue is, and what needs to happen for healing to take place. Consequently, the focus is on the client's inner experience. Rogers also stressed the self-actualizing tendency of the human person, and the organismic valuing ability that allowed persons to tune into the different aspects of their inner experience and use this as an inner compass to move in the direction of greater functioning and wholeness. Bohart and Watson stated that "persons function most effectively when they are aware of and take into account the wisdom of their organisms" (p. 230). The broad brushstrokes of humanistic theory often did not provide sufficient guidelines on what to do in the actual client session. Gendlin's (1996) six-step focusing provided a stepwise approach to translating humanistic principles into therapy steps. The six-step focusing steps help to contact the bodily felt sense, help deepen present-moment experiencing, and provide instruction to help clients tune into their organismic valuing and inner meaning-making process.

In keeping with the humanistic tradition, CT also emphasizes therapeutic rapport, attention to inner experience, recognition of the person's inner wisdom and self-actualizing potential, and the role of the therapist in providing the safe space and direction toward wholeness. Similar to six-step focusing (Gendlin, 1996), CT facilitates attention to the different aspects of one's present-moment experiencing. CT personifies this as the "part of me that does something 'I' am not so happy about" (Andreas & Andreas, 1996, p. 278). There can thus be a number of *parts*, or aspects of an experience, that may need attention. For instance, there may be feelings around anger, hurt, disappointment, and shame that are all associated with the same experience. CT addresses each of these as separate parts of one's experience. Consequently, each part will be individually addressed through the CT process, contributing to the movement of the person toward growth and wholeness. The length of the CT session will therefore be influenced by the number of parts or aspects of the problem that have to be resolved and integrated (Andreas & Andreas, 1994). Building on the work of Alfred Adler (Sweeney, 2009), CT also assumes that every behavior has a positive intention and is goal directed. A unique feature is that CT pursues the idea of a positive underlying intention, eliciting deeper intermediate outcomes until an ultimate or transcendent outcome emerges in the person's experience. This is referred to as the core state (Andreas & Andreas, 1996).

Cognitive–Behavioral Perspectives and CT

Cognitive behavior therapy (CBT) has proved a valuable resource in navigating life challenges. Cognitive therapy has emphasized the "influence of distorted thinking and unrealistic cognitive appraisals of events on an individual's feelings and behavior" (Knapp & Beck, 2008, p. s55). CBT approaches hold that cognitive processing and appraisal of events affect behavioral expression and emotional experiencing (Knapp & Beck, 2008). Similarities between CBT and CT include attention to specific issues, assumption of client agency and self-efficacy, and psychoeducational processes by which clients become their own therapists. Both CBT and CT explore specific situations of difficulty as the first step of therapy. However, whereas CBT seeks to uncover cognitive distortions, core beliefs, and schemata, CT focuses on the goal the person is trying to achieve through the problem patterns of behavior, thinking, or emoting and uses this as a stepping-stone to elicit resourceful, affective states that are used to transform the problem behaviors, cognitions, and beliefs.

The CT Process

At the first step in a typical CT session, the client is asked to choose an issue, thought, feeling, or behavior that he or she would like to transform. The client then chooses a specific event when the difficulty was experienced and relives the event in order to get a bodily felt sense of the issue. At the second step of the process, the client tunes in to the bodily felt sense of the part, thanking it for its underlying positive intention, and then asks the part what it wants. The client then turns inwards to await an answer, which emerges in terms of both words and a new emerging bodily sense. Once an answer emerges, at the third step, the part is invited to step into and experience what it is like to already have this initial outcome fully and completely. The question is then posed again: "What do you want through this [initial outcome] that is even deeper or more important?" This question is repeated with each deeper intermediate outcome that emerges into the person's felt experience. Typically, the initial intermediate outcomes have to do with getting something from others, whereas deeper levels of intended outcomes tend to be more about inner processes, such as fulfillment and satisfaction (Andreas & Andreas, 1996). Ultimately, the person is drawn into the felt bodily experience of a core state, which carries a profound sense of wholeness and well-being. The core state has no relationship with doing or getting something: "It is beyond action, beyond separation and dichotomy, beyond conflict" (Andreas & Andreas, 1996, p. 292). This core state is typically characterized by marked physiological changes, such as relaxed deep breathing and changes in skin color often perceived as a glow in the skin (Andreas & Andreas, 1994). The next step of the process reverses the outcome chain by associating the core state to each of the intermediate outcomes and, finally, to the presenting problem. This is done by recursively asking the question, "When you already have the [core state] fully and completely, how does already having the [core state] enrich the experience of [name of the preceding intermediate outcome]?" (Andreas & Andreas,

1996, p. 290). Sufficient time is given after the questions to allow the integration of each intermediate outcome into the core state. The final step involves integrating the core state into the problem situation by inviting the part to experience how "already having the [core state] as a way of being transforms the situation where you used to have [the limitation you began with]" (Andreas & Andreas, 1996, p. 290). CT follows a carefully scripted protocol whereby the wording, tonality, pace of speaking, and pauses for silence contribute to eliciting the core state, linking it to intermediate outcomes, and evoking broad-based change that goes beyond mere symptom resolution.

Andreas and Andreas (1994, 1996) reported using CT successfully in addressing a wide range of issues, such as abuse, eating disorders, addictions, trauma, mood disorders, and anxiety disorders. Andreas and Andreas (1996) stated that, regardless of the presenting problems, CT is "remarkably effective in changing symptoms, . . . addresses a very broad range of limitations, . . . is intrinsically kind and compassionate, . . . can be used to deal with resistance to change, . . . and tends to bring about 'deep-level' change" (pp. 275–276). They have presented case studies regarding the efficacy of this process (Andreas & Andreas, 1994, 1996). CT trainers and practitioners widely use it and acclaim its benefits (see Chenowith, 2001; Schachterle, 2001). CT was developed in the United States, but there are licensed trainers across five continents (see www.coretransformation.org).

The brevity of the CT process, its structured protocol, wide applicability, and great efficacy make it ideal for research and use in the current time-limited treatment context. A pilot study examining the treatment effects brought about by a single group intervention of CT (Braganza & Piedmont, 2015) indicated significant reductions in mean scores for anxiety and depression over a period of 4 weeks from Time 1 to Time 2. Furthermore, the effects of CT were consistent across the different age groups. Braganza and Piedmont's (2015) results provided some quantitative support for the significant positive impact of CT in the symptom experience of individuals and recommended further research on CT. However, this study represents the only quantitative evidence of CT's effectiveness. Thus, more research is needed to understand its utility and efficacy in resolving mental health issues.

Current Status of Clinical Approaches

Preliminary research into an intervention needs a way to compare its efficacy with other proven approaches and its incremental efficacy or cost-effectiveness. Effect sizes are a common way to compare different studies and evaluate the comparative effectiveness of interventions. CT should, at the very least, demonstrate comparable effect sizes with other evidence-based protocols. A brief review of clinical studies is presented in order to have some framework for evaluating the effectiveness of CT. CT has elements in the protocol that address affective, cognitive, and behavioral aspects, in addition to unearthing earlier roots of current problems. There is also attention to present-moment experiencing, such as is found in mindfulness approaches and in experiential focusing (Hinterkopf, 1983). Given these similarities with other treatment modalities, a brief overview of humanistic–experiential, CBT, psychodynamic, and mindfulness research follows. The following meta-analyses present effect sizes mostly in terms of Cohen's *d*.

De Jong and DeRubeis (2018) cited results of a meta-analysis of 186 studies by Elliott, Greenberg, Watson, Timulak, and Freire (2013) using humanistic–experiential psychotherapy (HEP) approaches. This meta-analysis indicated large effect size improvements ($d = 0.98$) both from pretest to posttest and as compared with untreated controls. Comparisons with CBT showed small but significant differences in favor of CBT approaches ($d = –0.01$), whereas comparisons with non-CBT approaches indicated similar small significant differences in favor of HEP ($d = 0.15$). The average length of therapy in the studies was 20 sessions. Present-moment emotional experiencing was one of the key factors contributing to positive outcomes.

Abbass, Town, and Driessen (2012) conducted a meta-analysis of 21 studies (10 controlled and 11 uncontrolled) using intensive short-term dynamic psychotherapy for clients with mood, anxiety, personality, and somatic disorders. There were large effect sizes ($d = 1.18$) over control treatments for general psychopathology, depression, and anxiety from pre- to posttreatment, over an average treatment schedule of 18 sessions.

A meta-analysis of 30 studies using group CBT for general symptomatology found moderate overall effects over control groups, from pre- to posttreatment, with large effects for depression, panic, and social phobia and moderate effects for anxiety (Petrocelli, 2002). Covin, Ouiment, Seeds, and Dozois (2008) analyzed 10 studies that used CBT for generalized anxiety disorder and found a large effect size reduction in pathological worry over control groups, over an average of 13.46 sessions. Butler, Chapman, Forman, and Beck (2006) reviewed several meta-analyses and found that CBT demonstrated large controlled effect sizes over multiple sessions (4 to 37.5 weeks; Gloaguen, Cottraux, Cucherat, & Blackburn, 1998) in treating adult depression, adolescent depression, generalized anxiety disorder, social phobia, obsessive compulsive disorder, and the reduction of depressive and anxiety symptoms ($d = 0.82$ to 1.30) in the treatment of posttraumatic stress disorder (PTSD) over wait-listed controls.

Grossman, Niemann, Schmidt, and Walach (2004) analyzed 20 studies researching the health benefits of mindfulness-based stress reduction (MBSR). The studies covered a broad range of clinical and stressed nonclinical populations. Results indicated moderate effect sizes over

controls for mental health variables (*d*s = 0.53 and 0.56) in nonclinical and clinical samples, respectively. A more recent meta-analysis of controlled outcome studies on the effects of MBSR on the mental health of adults with a chronic health disease indicated small effects for depression and psychological distress, and moderate effects for anxiety (Bohlmeijer, Prenger, Taal, & Cuijpers, 2010). Bohlmeijer et al. (2010) suggested that the small effect sizes could have been due to ceiling effects, as participants did not have high symptom levels. A meta-analysis of 29 studies on mindfulness research using nonclinical samples indicated moderate effect sizes in both uncontrolled and controlled studies (Hedges's $g = 0.55$ and 0.53, respectively) for anxiety, depression, distress, and quality of life (Khoury, Sharma, Rush, & Fournier, 2015). These studies followed the 8-week MBSR protocol with 20 minutes of mindfulness practice daily and 2.5 hours of group sessions weekly. A meta-analysis of brief mindfulness training consisting of single-session induction or daily sessions for 2 weeks duration indicated small effects in reducing negative affectivity in controlled studies ($g = 0.21$), with no significant differences between clinical ($g = 0.33$) and nonclinical ($g = 0.19$) samples (Schumer, Lindsay, & Creswell, 2018).

Research in single-session therapy has indicated large treatment effects over wait-listed controls for earthquake-related PTSD using modified behavior therapy (Basoglu, Salcioglu, Livanou, 2007), moderate uncontrolled effects for specific phobias using exposure therapy (Ollendick et al., 2009), and small uncontrolled effects in general mental health issues in children and youth (Perkins, 2006; Perkins & Scarlett, 2008) using solution-focused approaches. Sessions ranged from 1 to 3 hours. Treatment effects from single-session and multisession approaches were equivalent.

These meta-analyses of clinical research indicated that multiple sessions of the various therapeutic approaches produced effect sizes ranging from $d = 0.26$ to 1.51 over control groups. Most of the studies mentioned have focused on clinical populations and not on community samples. However, as the mindfulness research has indicated, effect sizes were somewhat smaller in community samples than in clinical ones. In addition, there could be some ceiling effects in community samples due to lower symptom levels, which could result in smaller effect sizes. Keeping these caveats in mind, the studies described do provide some framework for evaluating the efficacy of CT. To be considered relevant, CT needs to demonstrate comparable effects.

Study Aims and Hypotheses

The purpose of this investigation was to study the effect of CT on several psychological outcomes. More specifically, it was proposed that even a single session of CT should result in

1. significant decline in affective symptom experience and emotional lability as measured by lowered scores on the 12-item General Health Questionnaire (GHQ-12; D. P. Goldberg & Williams, 1988) and improved scores on the Affect Balance Scale (ABS; Bradburn, 1969); and
2. significant increases in both emotional well-being, as measured by the Emotional Stability subscale of the 50-item version of the International Personality Item Pool (IPIP-50; L. R. Goldberg, 1992) personality scale, and psychological maturity, as measured by the Purpose in Life (PIL; Crumbaugh, 1968) test.

The present study utilized the GHQ-12 to measure symptom change because the sample was predominantly nonclinical. Earlier research has indicated that CT affected even the more stable dimensions of personality, especially neuroticism or emotional stability; hence, the IPIP-50 was included in the present study. Emotion regulation, psychological maturity, and meaning making are important outcomes in therapy; hence, the ABS and PIL test were made a part of the present study, with the ABS measuring changes in emotional lability and the PIL measuring psychological maturity.

Research Design

The current research involved the use of both a treatment and a delayed treatment group, with multiple baseline measurements. A power analysis for a repeated measures multivariate analysis of variance (MANOVA) with two groups and three measurement times indicated a desired sample size between 126 and 158 participants. Hence, the targeted sample size was 150 participants. Research participants were randomly assigned to one of two groups by drawing lots. Both groups were assessed at Time 1. Individuals from the treatment group were guided through a single session of CT, while the delayed treatment group acted as a wait-list control. After 4 weeks, both groups were assessed a second time using the same self-report questionnaires as at Time 1. After this second assessment, participants from the second group, who had initially received no treatment, were guided through CT, and then 4 weeks later, both groups were assessed for a third time using the same questionnaires.

Method

Participants

The present research was conducted in India. Participants were contacted through Catholic educational institutions in the cities of Mumbai and Pune, in the state of Maharashtra. All participants were Indian. In order to get a diverse sample who were all fluent in English, teachers and parents of students studying in these institutions were invited to participate. At

an initial meeting with the potential participants, the primary researcher (first author) described the research, including informed consent and logistical details, and invited people to join the research. Participants were informed that they would be randomly assigned to either an initial treatment or a delayed treatment group. Interested persons then met the primary researcher to sign up. All participants were above 18 years of age.

It was noted that despite almost equal representation of males and females at the initial meeting, most of the men did not choose to join the research. This can be partly attributed to the stigma in India associated with counseling and mental health issues. Another related reason could be that most men were working full time and did not want to invest the time needed for the CT session and completion of questionnaires. Several men mentioned that they were interested in the study but would ask their wives to join the study instead. The second issue related to the language—English. Mumbai and Pune are cities with large Catholic populations that are fluent in English, either having English as their mother tongue or having been educated in English-medium institutions, with most having at least a college degree. Although there were many people from other religions also present at the initial meetings, a large percentage of these did not know English sufficiently. Consequently, they were unable to participate, despite showing an eagerness to take part. A final factor possibly influencing the composition of the research participants can be attributed to the fact that the primary researcher was a Catholic priest from a similar Indian background. These factors possibly contributed to a cohort that was predominantly female, college educated, and Catholic.

The final sample size ($N = 129$) consisted of 65 people in Group 1 and 64 people in Group 2. There were 16 male and 113 female participants, with a mean age of 41.6 years. Regarding religious affiliation, most identified as Catholic (74.4%, $n = 96$), followed by Hindu (15.5%, $n = 20$), Protestant (7.8%, $n = 10$), Muslim (1.6%, $n = 2$), and Parsi (0.8%, $n = 1$). The majority (54.3%, $n = 70$) were married, and 70.5% ($n = 91$) had completed graduate or professional studies. The remaining had completed only secondary schooling or postsecondary education. The largest ethnic group was from Maharashtra (47.3%, $n = 61$), followed by Goa (14.7%, $n = 19$), Mangalore (10.9%, $n = 14$), and Tamil Nadu (3.1%, $n = 4$). Sixteen participants did not indicate their ethnicity, and the remaining 15 represented a sprinkling from 10 other Indian states.

Measures

IPIP-50. The IPIP-50 scale (L. R. Goldberg, 1992) is a 50-item measure of the five-factor personality model, with 10 items per factor. Research has demonstrated its structural validity across cultures (Mlacic & Goldberg, 2007), gender, and ethnic groups (Ehrhart, Roesch, Ehrhart, & Kilian, 2008). Test takers rate how well the items describe them on a Likert-type scale ranging from 1 (*very inaccurate*) to 5 (*very accurate*). Sample items include "I am the life of the party," "I feel little concern for others," and "I get stressed out easily." The IPIP-50 subscales have compared favorably with commercial measures of the Big Five personality model (Gow, Whiteman, Pattie, & Deary, 2005; Lim & Ployhart, 2006; Mlacic & Goldberg, 2007) and have maintained stability in Indian samples (Khan & Khan, 2014; Kumar, Bakshi, & Rani, 2009; Michele & Sumathi, 2015). The present study utilized the Emotional Stability subscale to measure stable temperamental dimensions of emotional well-being.

PIL. The 20-item PIL, developed by Crumbaugh (1968), rates a person's *will to meaning* (Frankl, 1969)—that is, the extent to which people experience meaning and purpose in their lives. Each bipolar item is scored on a 7-point Likert-type scale. Sample items include "I have discovered no mission or purpose in life" (Pole 1) versus "I have discovered clear cut goals and a satisfying life purpose" (Pole 2). PIL scores appear positively correlated with psychological well-being (Zika & Chamberlain, 1992), ability to cope with loss (Pfost, Stevens, & Wessels, 1989), and recovery from substance abuse (Marsh, Smith, Piek, & Saunders, 2003). The PIL has demonstrated adequate reliability ($\alpha = .85$ to .88) in Indian samples (Piedmont & Braganza, 2015; Piedmont & Leach, 2002). The PIL also measures psychological maturity.

ABS. The ABS is a 10-item forced-choice (*yes* or *no*) scale (Bradburn, 1969) that measures positive affect (Positive Affect subscale [PAS]), negative affect (Negative Affect subscale [NAS]), and affect balance (NAS minus PAS). Items include statements such as "During the past few weeks, did you ever feel (a) proud because someone complimented you on something you had done? or (b) upset because someone criticized you?" The ABS measures psychological well-being as accessed through mood states (Kempen, 1992) and has shown correlations with overall happiness ratings (Lowenthal, Thurner, & Chiriboga, 1975), with adequate alpha reliabilities ($\alpha = .63$ to .71 for the PAS; $\alpha = .65$ to .69 for the NAS) in Indian samples (Piedmont & Braganza, 2015; Piedmont & Leach, 2002). The PAS, NAS, and ABS measure affective well-being.

GHQ-12. The GHQ-12 (D. P. Goldberg & Williams, 1988) is a screening tool for psychological distress that has been used widely in a variety of cultural contexts. The measure uses a 4-point Likert-type scale with responses ranging from 0 (*not at all*) to 3 (*much more than usual*). Sample items include "Have you recently . . . lost much sleep over worry" or "felt constantly under strain?" Scores on this 12-item scale have demonstrated adequate reliability ($\alpha > .80$) and validity across a range of cultures, including in India (Baksheev, Robinson, Cosgrave, Baker, &Yung, 2011; Bhui, Bhugra, & Goldberg, 2000; Coffey,

Samuel, Collins, & Morris, 2014). The GHQ-12 measures symptom levels.

Demographic questionnaire. The Time 1 set of measures included a demographic questionnaire with items on age, gender, ethnicity, religious affiliation, and education level.

Rating checklist. A five-item rating checklist was developed by the first author as a measure of global well-being. Participants rated their overall feeling about their lives, work, God, relationships, and faith community on a seven-item Likert-type scale with responses ranging from 1 (*terrible*) to 7 (*delighted*).

Procedure

This research study was reviewed and approved by the institutional review board of a private, Catholic liberal arts university. Participants were randomly assigned to one of two groups. The four couples (eight individuals) who signed up were treated as single persons and randomly assigned to either group. This was done to minimize dilution of treatment effects, even though it possibly affected the randomization process. Participants were requested not to share their experiences with those from the other group until all three testing times had been completed.

At the first large group meeting, all research participants were given a packet with three sets of coded measures to complete. Group 1 participants brought the first completed set of measures when they attended their CT session. At the session, they were given the exact dates for completing the second and third sets of measures. Group 2 participants completed the first set of measures on-site and received two further sets of measures. The second set of measures was to be completed 4 weeks later. Text message reminders were sent to Group 2 participants about completing the second set of measures, which they brought when they came in for the CT session on the specified days. After the CT training, they received the date on which they had to complete the third set of measures. Text message reminders were sent to all participants on the scheduled dates to ensure that all participants had exactly 4 weeks between receiving the CT training and completing the measures.

The primary researcher, who has been trained in CT therapy, guided each participant individually through a CT session. The session lengths ranged from 45 minutes to 2 hours depending on the ability of the client to tune into his or her inner experience and on the number of aspects of an issue that emerged during the process. The sessions began with a brief overview of the process as outlined in the CT participant notes (Andreas, 2011), which each person received. Each participant then chose an area of difficulty that he or she wished to transform. The primary researcher then guided the person through the steps of the CT protocol to address the issue. The script of the CT participant notes was followed throughout the process. After the CT session was completed, the various steps were explained so that participants could have a clearer idea of the process as they had experienced it, in reference to the CT protocol.

Research participants brought a variety of issues to the CT sessions. Presenting problems ranged from recent to long-term difficulties, bereavement issues, interpersonal issues, and work-related stressors. The issues that emerged in session included serious clinical concerns, such as trauma and sexual abuse ($n = 6$), domestic violence ($n = 3$), major depressive episode ($n = 2$), generalized anxiety disorder ($n = 4$), subclinical depression and anxiety issues ($n = 6$), anger issues ($n = 11$), bereavement ($n = 4$), phobias ($n = 1$), and serious relationship difficulties ($n = 23$), which were linked to symptoms of anxiety. There were also less serious concerns, such as difficulties in decision-making, adjusting to changes at work, procrastination, and lack of confidence. One participant was on medication for depression with a current diagnosis of major depressive disorder, and two reported a history of suicidal ideation with attempts at suicide.

After the CT session, participants were not given any instructions about whether to continue doing CT on their own. They were reminded only to complete the next set of tests 4 weeks later. Follow-up texts and phone calls with participants helped ensure that participants were not experiencing any undesirable effects after the CT session. No participant mentioned any aggravation of symptoms in these follow-up communications. After the third round of data collection was completed, the names of those who participated were entered into a lottery, from which 10 names were drawn. The winners were given a prize of 2,000 rupees each (approximately $25). There was no other compensation or incentive offered.

Results

Data Screening

A total of 147 individuals entered the study and completed Time 1 data. Seventeen people dropped out of the study either before completing the CT session or before completing the second set of measurements. A one-way MANOVA, run with all the Time 1 measures (Emotional Stability, PIL, ABS, GHQ-12, and rating checklist) as the dependent variables, compared those who dropped out versus those who continued in the study. There were no significant differences, Wilks's $\lambda = .91$, multivariate $F(15, 113) = 0.74$, $p = .74$ (*ns*). Chi-square analyses on demographic variables (gender, age, ethnicity, education level, religion, marital status, and reasons for joining) also showed no significant differences between those who dropped out versus those who continued in the study. The 17 people who dropped out and one multivariate outlier were removed from the study, leaving 129 participants (Group 1 = 65, Group 2 = 64) whose data were used in all further analyses.

Participant Profiles on the Various Measures

Table 1 presents the means, standard deviations, and alpha reliabilities of all the measures for the three measurement

TABLE 1

Group Means and Standard Deviations for Three Measurement Times

	Initial Treatment Group (n = 65)						Delayed Treatment Group (n = 64)								
	Time 1		Time 2		Time 3		Time 1		Time 2		Time 3		Alpha Reliability[a]		
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	T1	T2	T3
IPIP-50															
ES	27.43	8.37	30.64	7.23	32.50	7.64	29.25	7.41	30.02	7.50	31.86	6.71	.85	.83	.83
PIL	98.18	23.09	104.50	21.07	105.56	21.54	103.38	18.88	105.39	21.03	110.39	18.96	.89	.93	.94
GHQ-12	13.24	7.84	7.50	5.36	6.82	6.34	10.91	6.94	9.70	6.06	6.31	5.31	.92	.89	.92
PAS	3.01	1.36	3.64	1.77	3.71	2.44	3.40	1.29	3.45	1.57	4.04	1.24	.59	.72	.74
NAS	1.84	1.37	1.15	1.48	1.12	2.20	1.84	1.65	1.36	1.42	1.00	1.37	.77	.72	.73
ABS	1.21	1.48	2.53	1.36	2.61	2.33	1.56	2.43	2.09	2.38	3.04	2.19			
Rating	25.00	4.01	25.90	3.83	26.80	4.46	25.58	4.41	26.68	4.75	27.17	4.46	.80	.86	.89

Note. IPIP-50 = 50-item International Personality Item Pool; ES = Emotional Stability subscale; PIL = Purpose in Life test; GHQ-12 = 12-item General Health Questionnaire; PAS = Positive Affect subscale; NAS = Negative Affect subscale; ABS = Affect Balance Scale; Rating = rating checklist (global well-being).

[a]Alpha reliability is for both groups combined at Time 1 (T1), Time 2 (T2), and Time 3 (T3).

times. As Table 1 indicates, all of the measures had adequate alpha reliability. Time 1 scores on the IPIP-50 were similar to scores from previous U.S. (Robertson, Jangha, Piedmont, Sherman, & Williams, in press) and Indian (Michele & Sumathi, 2015) samples and hence could reasonably be considered to fall within the average range. Time 1 GHQ-12 scores hovered around the *caseness* cutoff score of 12 (D. P. Goldberg et al., 1997), which indicates that some participants in this sample were experiencing significant emotional distress. Similarly, PIL scores were also within the average range of 92–112 (Crumbaugh & Maholick, 1964).

Evaluating Group Equivalency

Random assignment of research participants to the two treatment conditions was done to ensure equivalency of the two groups. A one-way MANOVA conducted using all the Time 1 measures as dependent variables found no significant differences between the groups, Wilks's $\lambda = .91$, multivariate $F(15, 113) = 0.79$, $p = ns$. Post hoc independent-samples t tests confirmed that the two groups did not differ significantly on any of the Time 1 measures. This indicates that the random assignment of participants did ensure equivalent groups at Time 1.

Within-Group Norms Approach

Given the demonstrated equivalence of groups, to display observed changes over time clearly, a within-group norms approach was adopted (Kleinbaum, 1978). The within-group norms approach facilitated presenting scores and changes in scores in terms of standard deviation units. Scores at all three measurement times were standardized based on the Time 1 means and standard deviations for each group. Table 2 presents these standardized scores, which indicate clear improvements over time for the entire sample in affective symptom experience (GHQ-12), emotional lability (PAS, NAS, and ABS), emotional well-being (Emotional Stability), and psychological maturity (PIL) from pre- to posttreatment.

Improvements on Outcome Measures

A two groups by three measurement times (2 × 3) repeated measures MANOVA was run using the GHQ-12, PIL, PAS, NAS, Emotional Stability, and rating checklist as the dependent variables. There was no significant effect for groups, Wilks's $\lambda = .92$, multivariate $F(7, 121) = 1.61$, $p = .92$. There was a significant effect for time of assessment, Wilks's $\lambda = .51$, multivariate $F(14, 114) = 7.75$, $p < .001$, partial eta squared (η_p^2) = .49. All outcome variables demonstrated significant changes over time. There was also a significant Time × Group interaction effect, Wilks's $\lambda = .79$, multivariate $F(14, 114) = 2.11$, $p = .016$, $\eta_p^2 = .206$. At the univariate level, moderate to small significant interaction effects were demonstrated in symptoms (GHQ-12), $F(2, 254) = 6.05$, $p = .003$, $\eta_p^2 = .045$; PAS, $F(2, 254) = 2.94$, $p < .05$, $\eta_p^2 = .023$. Emotional Stability (IPIP-50) was on the borderline of significance, $F(2, 254) = 2.94$, $p = .055$, $\eta_p^2 = .023$. Additionally, Table 3 presents the results of post hoc independent-samples t tests for the various measures at Time 2, and the within-group, repeated measures t tests for the outcome measures. These between-group t tests indicated significant differences between the treatment and control groups at Time 2 for the GHQ-12 and PAS. The repeated measures t tests indicated significant differences between pre- and posttreatment measurements across all of the outcome

TABLE 2

Mean *z*-Score Changes on Outcome Variables and Associated Cohen's *d* for Each Group Over Time

	Initial Treatment Group (n = 65)				Delayed Treatment Group (n = 64)					Between Group
Measure	TXI[a] *M*	*d*	TSI[b]	*d*	Control[a] *M*	TXI[c] *M*	*d*	TSI[b]	*d*	Effect Size at T2 *d*
IPIP-50										
ES	.38	.56	.61	.91	.10	.25	.31	.35	.44	.30
PIL	.27	.25	.32	.49	.11	.26	.33	.37	.53	.16
GHQ-12	–.73	.69	–.82	.75	–.17	–.49	.51	–.66	.64	.72
PAS	.46	.42	.51	.41	.04	.46	.39	.50	.41	.38
NAS	–.39	.42	–.41	.43	–.29	–.22	.21	–.51	.51	.12
ABS	.54	.51	.57	.52	.22	.39	.36	.61	.56	.34
Rating	.22	.28	.45	.50	.25	.11	.12	.36	.42	.03
M OC	.43	.46	.55	.63	.17	.30	.33	.47	.52	.31

Note. Scores are in *z*-score units and correspond to Cohen's *d*. IPIP-50 = 50-item International Personality Item Pool; ES = Emotional Stability subscale; PIL = Purpose in Life test; GHQ-12 = 12-item General Health Questionnaire; PAS = Positive Affect subscale; NAS = Negative Affect subscale; ABS = Affect Balance Scale; Rating = rating checklist (global well-being); *M* OC = mean outcome change (i.e., mean absolute values of ES, PIL, GHQ-12, PAS, NAS, and rating checklist).
[a]TXI = improvement from Time 1 to Time 2 (T2). [b]TSI = improvement from Time 1 to Time 3. [c]TXI = improvement from Time 2 to Time 3.

measures: affective symptom experience (GHQ-12), emotional lability (PAS, NAS, and ABS), emotional well-being (Emotional Stability, IPIP-50), and psychological maturity (PIL). These improvements were replicated in the delayed treatment group. In Group 2, scores on NAS demonstrated a noticeable decline, and scores on the rating checklist (global well-being) showed a clear increase even before any treatment intervention. Testing and/or experimenter effects probably confounded these observed improvements. The research findings indicated that all the research hypotheses were supported by significant improvements in scores on all of the dependent variables: affective symptom experience (GHQ-12), emotional lability (ABS), emotional well-being (Emotional Stability), and psychological maturity (PIL).

Measuring Clinical Significance

Effect size approach. Cohen, Cohen, West, and Aiken (2003) indicated that *z*-score changes of 0.10, 0.31, and 0.50 can indicate small, moderate, and large effects, respectively (p. 644). Table 2 presents the effect sizes in terms of *z*-score changes and Cohen's *d* (0.2 = small, 0.5 = moderate, >0.8 = large), which indicate that the single CT session produced moderate to small effect sizes. Table 2 also highlights comparisons

TABLE 3

Significant and Nonsignificant Within-Group and Between-Group Changes on Outcome Variables

	Time 1 to Time 2				Time 2 to Time 3				Time 1 to Time 3				Time 2 Between Groups	
	Group 1		Group 2		Group 1		Group 2		Group 1		Group 2			
Measure	*t*	*p*	*t*	*p*	*t*	*p*	*t*	*p*	*t*	*p*	*t*	*p*	*t*	*p*
GHQ-12	–5.59	.001	–1.80	.080	–1.03	.310	–4.07	.001	–6.05	.001	–5.14	.001	4.06	.001
ES	4.53	.001	1.19	.241	2.74	.008	2.47	.016	7.31	.001	3.52	.001	1.69	.094
PIL	2.00	.050	1.33	.189	0.38	.710	2.62	.011	3.94	.001	4.24	.001	0.94	.351
PAS	3.42	.001	0.29	.770	0.44	.665	3.11	.003	3.30	.002	3.30	.002	2.15	.034
NAS	–3.37	.001	–2.52	.014	–0.21	.837	–1.68	.099	–3.50	.001	–4.06	.001	0.66	.510
ABS	4.15	.001	1.78	.081	0.35	.731	2.91	.005	4.19	.001	4.46	.001	1.94	.055
Rating	2.26	.027	2.29	.025	2.53	.014	0.96	.339	4.01	.001	3.36	.001	0.14	.893

Note. From Time 1 to Time 2, Group 1 (n = 65) received treatment. From Time 2 to Time 3, Group 2 (n = 64) received treatment. Time 1 to Time 2, Time 2 to Time 3, and Time 1 to Time 3 indicate within-group *t* scores. GHQ-12 = 12-item General Health Questionnaire; ES = Emotional Stability subscale; PIL = Purpose in Life test; PAS = Positive Affect subscale; NAS = Negative Affect subscale; ABS = Affect Balance Scale; Rating = rating checklist (global well-being).

between the control, treatment, and follow-up phases of the two groups. The between-group effect sizes at Time 2 indicate the controlled effect sizes between the initial treatment group and the delayed treatment group. In general, both groups demonstrated similar patterns and magnitude of changes across the various measures for the entire study duration. These similar patterns of change, especially in symptoms (GHQ-12), emotional lability (PAS, NAS, and ABS), and psychological maturity (PIL), indicate that the CT session produced consistent patterns of change in both groups.

Scores on the GHQ-12 were also used to measure changes in symptom experience after the CT session. D. P. Goldberg et al. (1997) stated that a caseness cutoff score of 12 on the GHQ-12 could be used to screen those who were likely to have a psychological diagnosis. According to this criterion, there were 44 individuals out of 129 with GHQ-12 scores falling above the cutoff mark prior to the CT session. This number dropped to 17 when participants were measured after the single CT session. This indicates that 61% of those who could have had a clinical diagnosis before treatment no longer fell into this category 4 weeks after the CT session.

Discussion

Effects of CT on Symptom Reduction and Psychological Growth

As the results from this study have indicated, all the research hypotheses were supported with statistically significant declines in symptoms and moderate effect sizes for both Group 1 and Group 2, respectively, in affective symptom experience and emotional lability as measured by the GHQ-12 (*d*s = 0.75 and 0.64) and ABS (*d*s = 0.52 and 0.56). Similarly, there were significant moderate to small effect size increases in emotional well-being (Emotional Stability: *d*s = 0.91 and 0.44; rating checklist: *d*s = 0.50 and 0.42) and psychological maturity (PIL: *d*s = 0.49 and 0.53). These significant effects were replicated in both groups. The moderate mean effect sizes across the outcome measures for both groups (Group 1, $d = 0.63$; Group 2, $d = 0.52$) indicate that the single CT session did produce significant improvements across the various measures, thus supporting the research hypotheses. The reduction in symptom experience was especially striking because the single CT session produced moderate effect size improvements that were maintained 4 and 8 weeks after the single session, with scores on the Emotional Stability subscale demonstrating continued improvement up to 8 weeks after the session.

The changes measured indicate that the CT intervention positively affected a broad spectrum of clinically relevant individual difference measures (e.g., affective [ABS], symptomatic [GHQ-12], maturational [PIL], and temperamental [Emotional Stability]), with significant improvements in every category. These improvements indicate that benefits from CT occurred beyond mere symptom resolution and affected wider aspects of the person's life and functioning. This finding supports the claim that, regardless of the issue brought to therapy, CT effects *deep-level* change (Andreas & Andreas, 1996).

Some of the possible mechanisms of change are explored below. In the first instance, CT begins by attending to parts that produce the specific behaviors. These can be understood as focusing on specific aspects of one's inner experience. The problem is broken down to manageable pieces for the client. The emphasis on present-moment experiencing, and a bodily felt sense of both the issue and the intermediate outcomes, helps the client to sense the issue afresh and not out of remembered patterns of the past. A further aspect of the protocol is the very specific questioning, which directs attention to more positive, deeper, and important aspects of the experience. The phrasing of the questions—for example, "When you already have the intermediate outcome fully and completely, what does this part of you want through this intermediate outcome that is even more important"—allows the person to obtain an experiential, bodily felt sense of the desired outcome, which is more encompassing and holds a more impactful emotional state. Thus, increasingly resourceful states are accessed, which aid in the transformation of the problem. Target rewards that are more intense, more reliable, and more satisfying on a subjective level will often be sought out in place of lesser outcomes and may often replace problem behaviors (Hall & Rossi, 2008; Prochaska, Di Clementi, & Norcross, 1992). CT makes deeper and more rewarding outcomes available in the same contexts where the earlier problematic behaviors occurred, thus increasing the likelihood of transformation. Exploring how these resourceful core states affect different contexts and time frames, including the future, primes the client to a different response pattern in the future.

Study Strengths and Limitations

The research design of the present study helped to identify incidents of testing and experimenter effects, in addition to treatment effects. The multiple baselines with a wait-listed control design proved effective in demonstrating the robustness of the clinical intervention: It allowed a direct replication of the effect across two samples. The efficient design allowed for identifying the potential ongoing therapeutic effect over time. The within-group norms approach provided easily interpretable effect sizes, which facilitated recognizing and interpreting change across groups and over time in the different measures used. It also facilitated direct comparison of effects between the different tests and made it easier to compare the results with different studies.

Observer ratings and observable criterion validity measures would have strengthened the research findings.

Having multiple clinicians administer the treatment would also be helpful to minimize any demand characteristics of the process as well as mitigate any potential fatigue effects. That the primary researcher was also the primary therapist administering CT also introduced the possibility that the belief of the therapist in the efficacy of CT may have influenced the outcomes. The relatively homogeneous composition of the participants, and the fact that this was a nonclinical sample, limits the generalizability of the results. Assigning couples to the same group may have affected the randomization process, although there were no significant differences in Time 1 scores between the groups, possibly because of the small number of couples. Finally, as noted above, this study utilized just a single session of CT. Clinical studies generally measure the effect of an intervention after several sessions. Further research involving multiple sessions of CT would probably give results that are more accurate and robust.

Future Directions

Future research should explore the effects of multiple sessions of CT, include clinical populations, and explore the effects of CT on specific disorders. CT has shown itself in this study to be useful not just in reducing symptom experience and emotional lability, but also in fostering psychological maturity and overall well-being. This introduces the possibility of CT's efficacy as a tool for personal growth. If people were to adopt CT as a psychospiritual practice, similar to meditation and centering prayer (see Fox, Gutierrez, Haas, Braganza, & Berger, 2015; Fox, Gutierrez, Haas, & Durnford, 2016), what kinds of mental and physical health benefits could be expected? It would also be important to explore the processes in CT and other single-session therapies that facilitate such robust effect size improvements.

Implications for Counseling

The results of the present study have several implications for counseling.

Attention to present-moment experiencing. Elliot et al. (2013) reaffirmed the importance of present-moment experiencing as impacting positive therapy outcomes. Helping clients to tune into their bodily felt sense of issues, of what is important, and of what direction to take appears important for treatment outcomes. This is built into the CT protocol and facilitates present-moment emotional experiencing.

Facilitate rapport building with clients. Each client comes with his or her unique worldview, and part of the challenge of a therapist is to enter the inner world of the client (Rogers, 1957). The CT protocol helps to elicit the inner motivation strategy of the individual without the therapist imposing his or her worldview or value system on the client. As a result, clients feel understood and accepted as they are. This goes a long way in developing genuine rapport between the client and therapist. CT can help therapists to become truly multicultural.

A reliable way to address presenting problems. As mentioned earlier, this particular group of research participants brought a wide range of issues to the CT session, including depression, anxiety disorders, adjustment issues, emotional regulation issues, relational difficulties, trauma, and other less serious concerns. The issues that these participants brought are similar to those that counselors regularly encounter. This, therefore, is perhaps the primary utility in counseling: the ability of CT to reliably address the wide range of concerns that emerge in therapy. CT can be useful to any counselor, regardless of the kinds of issues involved. Thus, CT can be included as a viable treatment option alongside other single-session interventions (for examples of other single-session approaches, see Basoglu, Salcioglu, Livanou, 2007; Ollendick et al., 2009; Perkins, 2006; Perkins & Scarlett, 2008). CT's brief therapy modality may be particularly useful for counselors who work in a variety of settings that require time-limited treatment strategies.

Build a sense of agency in clients. The ability of CT to target specific issues and resolve them within a single session contributes to the clients' sense of agency. As counselors well know, clients often begin to identify with their disorder, and helping them to disidentify from their problems, and preventing demoralization, can be a major treatment goal (Frank & Frank, 1991). CT does this by its key presupposition that every behavior has a positive intention, and its focus on the "part that is producing the behavior." This approach limits the problem and implicitly gives the message that "I am more than my problem." Additionally, the core state experience gives an experiential feel of what it means to transcend one's problem. Hope is a crucial therapeutic factor germane to all effective counseling approaches (Frank & Frank, 1991; Norcross, 2011; Young, 2016), and CT can nurture this hope.

Build client resources. In addition to symptom reduction, building client resources is important in therapy. The CT protocol intertwines both of these dimensions. The core states accessed in session become a powerful resource in themselves. The positive effects can be multiplied by utilizing the timeline generalizations that associate these core states with multiple contexts across time. In the present study, this was demonstrated by the clear improvements not just in symptom experience, but also in levels of positive affect, psychological maturity, and ongoing changes at the level of personality (i.e., scores in Emotional Stability). These are the kinds of improvements that are dear to the hearts of counselors.

Therapist self-care. Finally, self-care is an absolute requirement for counselors and all of those engaged in the helping professions. CT provides a gentle, safe way to engage daily in this self-care and can be easily taught to counselors and

counselors-in-training. Making CT a part of their daily routine could help counselors prevent burnout and nurture their own well-being by connecting their core states to specific vocational stressors.

Conclusion

The present study makes an important contribution in providing empirical evidence on the clinical utility of the CT process. As hypothesized, the CT process has demonstrated significant and sustained improvements in scores, with small to moderate effect sizes across a range of measures. These results are comparable with other multisession approaches using nonclinical samples. Perhaps the greatest value of this study has been to demonstrate that the CT process works dependably across a range of presenting problems in contributing not merely to symptom resolution but to enhanced quality of life. These findings support the CT approach and encourage its wider application in the field.

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