

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

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Abstract

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 eight-week study period indicated significant, moderate overall effect sizes ($d_s = .63$ & $.53$) for Symptom Experience, Emotional Stability, Affect Balance, Global well-being, and Purpose in Life. Implications for research and clinical practice were discussed.

Key words: Core Transformation, Symptom Experience, Emotional Stability, Positive Affect, Purpose in Life, personality, incremental validity.

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Core Transformation: An Overview

Core Transformation (CT) is a manualized approach to therapy that acknowledges the *positive intention* underlying all behavior. CT accesses the organismic, goal-oriented motivation towards 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. By recursively posing the question, *“What does this part of you want through this behavior (or intermediate outcome) that is deeper or more important?”* CT accesses ever deeper levels of motivation, which ultimately open into the experience of deep, encompassing Core States such as Oneness, Union, and Being (Andreas & Andreas, 1994). By accessing these core states underlying behaviors, especially problematic ones, people get a larger and more encompassing sense of who they truly are. In this process, clients get a greater awareness of deeper levels of motivation. In addition, more resourceful states are accessed that allow the person greater freedom in dealing with the situations in which the problem behaviors earlier occurred.

The CT process has several distinct phases. The first phase begins with the presenting problem, and then uses this to elicit the outcome chain of progressively deeper underlying motives. This phase ends when the client cannot go any deeper and experiences a Core State, typically characterized by marked physiological changes such as relaxed deep breathing, and changes in skin color, often with a glow in the skin. The second phase reverses the outcome chain, linking the Core State to each of the intermediate outcomes, and finally to the presenting problem. The following phases focus on integrating the part responsible for the problem behavior, and on generalizing the Core State across one’s life span (Andreas & Andreas 1994).

CT follows a carefully scripted protocol, where 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) reported using CT successfully in addressing a wide range of issues such as abuse, eating disorders, addictions, trauma, mood disorders, and anxiety disorders. They have presented anecdotal evidence regarding the efficacy of this process. Core Transformation (CT) trainers and practitioners widely use and acclaim its benefits (see Chenowith, 2001; Schachterle, 2001). Core Transformation was developed in the United States but has licensed trainers across five continents (cf. www.coretransformation.org).

The brevity of the CT process, its structured protocol, and wide applicability 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 four weeks from Time 1 to Time 2. Further, the effects of CT were consistent across the different age groups. Braganza and Piedmont's 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 empirical evidence of CT's effectiveness. Thus, more research is needed to understand its utility and efficacy.

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 to other evidence-based protocols. A very 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 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 very brief overview of CBT, psychodynamic, and mindfulness research follows. The following meta-analyses present effect sizes mostly in terms of Cohen's *d*.

Abbass, Town, and Driessen, (2012) conducted a meta-analysis of 21 studies (10 controlled, & 11 uncontrolled) using Intensive Short-Term Dynamic Psychotherapy (ISTDP) for clients with mood, anxiety, personality, and somatic disorders. There were large effect sizes ($d = 1.18$) over control treatments for general psycho-pathology, depression, and anxiety from pre- to post-treatment, over an average treatment schedule of 19.7 sessions. A meta-analysis of 30 studies using Group Cognitive-Behavioral Therapy for general symptomatology found moderate overall effects over control groups, from pre- to post-treatment, with large effects (d) for depression, panic, and social phobia and moderate effects for anxiety (Petrocelli, 2002). Covin, Ouiment, Seeds, and Dozois (2008) analyzed 10 studies that used Cognitive-Behavioral Therapy (CBT) for generalized anxiety disorder and found a large effect size (Cohen's d) 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 from .82 to 1.30) in the treatment of PTSD over waitlisted 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 non-clinical populations. Results indicated moderate effect sizes (Cohen's d) for both mental and physical health over control groups. 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). These studies followed the 8-week MBSR protocol with 20 minutes of daily mindfulness practice and 2.5 hours of weekly group sessions.

Research in Single Session Therapy (SST) has indicated large size treatment effects over waitlisted 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 multi-session approaches were equivalent.

These meta-analyses of clinical research indicated that multiple sessions of the various therapeutic approaches produced effect sizes ranging from $d = .26$ to 1.51 over control groups and provide some framework for evaluating the efficacy of Core Transformation. To be considered relevant, CT would need 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:

- a) Significant decline in affective symptom experience and emotional lability, and
- b) Significant increases in emotional well-being and psychological maturity with well-being, symptoms and psychological maturity being the dependent variables.

This study addresses four questions: 1) how much of a change does CT effect in clients? 2) is the therapeutic effect replicable? 3) how does CT's treatment effect compare with other, related therapies (e.g., ISTDP, CBT, MBSR)? and, 4) is the clinical effect for CT durable over time?

Research Design

The current research involved the use of both a treatment and a wait-list control group, with multiple baseline measurements. Specifically, research participants were randomly assigned to one of two groups by drawing lots. Both groups were assessed at Time 1. Individuals from one group were guided through a single session of CT, while the second group acted as a waiting list control. After four weeks both groups were measured a second time on these dimensions. After this second assessment, participants from the second group, who initially received no treatment, were guided through CT, and then four weeks later both groups were assessed for a third time.

Method

Participants

The final sample size (N = 129) consisted of 65 persons in Group I and 64 persons in Group II. There were 16 males and 113 female participants with a mean age of 41.6 years. Seventy-four percent were Catholic, 54.3 % were married, and 70.4 % had completed graduate or professional studies. Seventy-two percent were from the Western coastal belt of India (Maharashtra, Goa, & Mangalore).

Measures

Big Five IPIP 50. The IPIP scale (Goldberg, 1992) is a 50-item measure of the Five Factor Model of personality, 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 scale

ranging from 1 (*very inaccurate*) to 5 (*very accurate*). Sample items include “I am ... “the life of the party”, “feel little concern for others”, “get stressed out easily,” etc. The IPIP – 50 scales have compared favorably with commercial measures of the Big Five (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 Purpose in Life Test (PILT). This 20-item measure was developed by Crumbaugh (1968) and rates a person's *will to meaning* (Frankl, 1969), the extent to which people experience meaning and purpose in their lives. Each bipolar item is scored on a 7-point Likert scale. Sample items include “I have discovered: (pole 1) no mission or purpose in life ... versus ... (pole 2) clear cut goals and a satisfying life-purpose.” PILT scores appear positively correlated with psychological well-being (Zika & Chamberlain, 1992), ability to cope with loss (Pfoest, Stevens, & Wessels, 1989), and recovery from substance abuse (Marsh, Smith, Piek, & Saunders, 2003). The PILT has demonstrated adequate reliability (.85 to .88) in Indian samples (Piedmont & Braganza, 2015; Piedmont & Leach, 2002).

Bradburn Affect Balance Scale (ABS). This 10-item, yes-no forced choice scale (Bradburn, 1969) measures Positive Affect (PAS), Negative Affect (NAS), and Affect Balance (ABS = 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? (b) Upset because someone criticized you?” The ABS measures psychological well-being as assessed through mood states (Kempen, 1992) and has shown correlations with overall happiness ratings (Lowenthal, Thurner, & Chiriboga, 1975), with adequate alpha (PAS: .63 to .71; NAS: .65 to .69) reliabilities in Indian samples (Piedmont & Braganza, 2015; Piedmont & Leach, 2002).

General Health Questionnaire – 12 (GHQ). The GHQ-12 (Goldberg & Williams, 1988) is a 12-item screener for psychological distress that has been used widely in a variety of cultural contexts. The measure follows a 4-point Likert scale from 0 (*not at all*) to 3 (*much more than usual*). Sample items include, “Have you recently... lost much sleep over worry?” “Felt constantly under strain?” Scores on this 12-item scale have demonstrated adequate reliability (above .80) and validity across a range of cultures including India (Baksheev, Robinson, Cosgrave, Baker, & Yung, 2011; Bhui, Bhugra, & Goldberg, 2000; Coffey, Samuel, Collins, & Morris, 2014).

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

Rating Checklist. A five-item Rating Checklist was developed by the first author as a measure of global wellbeing. Participants rated their overall feeling about their lives, work, God, relationships, and faith community on a 7-item Likert scale from 1 (*terrible*) to 7 (*delighted*).

Outcome Checklist (OC). A four-item outcome checklist was included with the post-CT-session test measures. This OC used a five-point scale, from *much better*, *better*, *no change*, *worse* and *much worse*, to rate the change participants had experienced in relating to themselves, others, work, and God. OC ratings were summed to create a total score.

Procedures

This research study was reviewed and approved by the Institutional Review Board of a private, Catholic, liberal arts university. 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 the primary researcher described the research to

the potential participants, 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 immediate-treatment or a delayed-treatment group. Interested persons then met the primary researcher to sign up. All participants were above 18 years of age. Participants were randomly assigned to one of two groups. If a couple wanted to join the research, both husband and wife were assigned to the same group. Participants were requested not to share their experiences with those from the other group until all three testing times had been completed. 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 send their wives to join the study instead. The second issue related to the language – English. Mumbai and Pune are cities having large Catholic populations who are fluent in English, either having English as their mother tongue or having been educated in English-medium institutions throughout, 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.

At the first large group meeting, all research participants were given a packet with three sets of coded measures to complete. Group I 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 II 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 reminders were sent to Group II 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 reminders were sent to all participants on the scheduled dates to ensure that all participants had exactly four 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 complexity of the issue. 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. The issues ranged from serious clinical concerns such as trauma and sexual abuse, domestic violence, clinical and sub-clinical depression and anxiety, anger issues, bereavement, and relationship difficulties to 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, and two subjects reported a history of suicidal ideation with attempts at suicide.

After the CT session participants were not given any instructions about whether or not to continue doing CT on their own. They were only reminded to complete the next set of tests four 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 completion of the 3rd round of data collection, the names of those who participated were entered into a lottery, from which ten names were drawn. The winners were given a prize of Rs. 2000/- each (approximately 25 dollars' worth). There was no other compensation or incentive offered.

Results

Data Screening

A total of 147 persons 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 (personality, PILT, Affect Balance, GHQ, 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' $\lambda = .91$, multivariate $F(15, 113) = .741, p = .74$ (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 seventeen persons who dropped out and one multivariate outlier were removed from the study leaving 129 subjects (Group I = 65, Group II = 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 3 measurement times. As Table 1 indicates, all the measures have adequate alpha

reliability. Time 1 scores on the IPIP-50 are very similar to scores from US (Robertson, Jangha, Piedmont, Sherman, & Williams, 2015), and Indian samples (Michele & Sumathi, 2015) and hence could reasonably be considered to fall within the average range. Time 1 GHQ scores hover around the “caseness” cutoff score of 12 (Goldberg et al., 1997) which indicate that some subjects in this sample were experiencing significant emotional distress. Similarly, PILT scores are 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' $\lambda = .91$, *multivariate* $F(15, 113) = .79$, $p = ns$. Post hoc independent sample *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 changes over time for the entire sample in symptoms, affect, cognitions, and meaning-making processes from pre- to post-treatment.

Improvements on Outcome Measures

A 2 (groups) by 3 (measurement times) repeated measures MANOVA was run using the GHQ, PILT, PAS, NAS, Emotional Stability, and Rating Checklist as the dependent variables.

There was no significant effect for groups, Wilks' Lambda = .92, *multivariate* $F(7, 121) = 1.61$, $p = ns$. There was a significant effect for time of assessment, Wilks' Lambda = .51, *multivariate* $F(14, 114) = 7.75$, $p < .001$, *partial eta*² = .49. All the outcome variables demonstrated significant changes over time. There was also a significant time by group interaction effect, Wilks' Lambda = .794, *multivariate* $F(14, 114) = 2.11$, $p = .016$, *partial eta*² = .206. At the Univariate level, moderate to small significant interaction effects were demonstrated in symptoms (GHQ), $F(2, 254) = 6.05$, $p = .003$, *partial eta*² = .045; Positive Affect (PAS), $F(2, 254) = 2.94$, $p < .05$, *partial eta*² = .023; and Emotional Stability (IPIP-50), $F(2, 254) = 2.94$, $p = .05$, *partial eta*² = .023. Table 3 presents the results of the 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 clearly indicate significant differences between the treatment and control groups at Time-2 for the General Health Questionnaire (GHQ-12) and Positive Affect (PAS). The repeated measures t-tests clearly indicate significant differences between pre and post treatment measurements across all the outcome measures – symptoms (GHQ), psychological maturity (PILT), Positive (PAS) and negative (NAS) affect, Affect Balance (ABS), Global wellbeing (Rating Checklist), and Emotional Stability (IPIP). These improvements were replicated in the delayed treatment group.

In Group II, scores on Negative Affect demonstrated a noticeable decline, and scores on Rating Checklist (global wellbeing) showed a clear increase in scores even before any treatment intervention. Testing, and/or experimenter effects probably confounded these observed improvements.

Measuring Clinical Significance.

Effect size approach. Cohen, Cohen, West, and Aiken (2003) have indicated that z-score changes of .10, .31, and .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 (.2 = small, .5 = moderate, >.8 = large), which indicates that the single Core Transformation session produced moderate to small effect sizes. Table 2 also highlights comparisons 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 treatment group and the waitlisted control. 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, positive, and negative affect indicate that the Core Transformation session did produce consistent patterns of change in both groups.

Discussion

Effects of Core Transformation on Symptom Reduction and Psychological Growth

Comparison with previous research. As the results from this study have indicated, all the research hypotheses were supported with statistically significant moderate effect size declines for both Group I and Group II respectively in affective symptom experience and emotional lability as measured by the General Health Questionnaire (GHQ; $ds = .75$ & $.64$) and Affect Balance Scale (ABS; $ds = .52$ & $.56$). Similarly, there were significant moderate to small effect size increases in global wellbeing (Rating Checklist; $ds = .50$ & $.42$) and psychological maturity (PILT; $ds = .49$ & $.53$). These significant effects were replicated in both groups. The moderate mean effect sizes across the outcome measures for both groups (Group I, $d = .63$; Group II, $d = .52$) compared favorably with previous research (Abbass, Town, & Driessen, 2012; Butler, Chapman, Forman, & Beck, 2006; Covin, Ouiment, Seeds, & Dozois, 2008; Petrocelli, 2002; Bohlmeijer, Prenger, Taal, & Cuijpers, 2010; Grossman, Niemann, Schmidt, and Walach, 2004). The reduction in symptom experience was especially striking because the single CT session produced moderate effect sized improvements that were maintained 4 and 8 weeks after

the single session, with the Emotional Stability scale demonstrating continued improvement up to 8 weeks after the session.

The changes measured indicate that the CT intervention positively impacted a broad spectrum of clinically relevant individual difference measures [e.g., affective (Affect Balance Scale), symptomatic (General Health Questionnaire), maturational (Purpose in Life), and temperamental (Emotional Stability – IPIP)] with significant improvements in every category. These improvements indicate that benefits from Core Transformation worked beyond mere symptom resolution and affected wider aspects of the person’s life and functioning.

A look at the integrative process of CT may help to understand the possible mechanisms of the observed changes. The issue that the person brings to the session is the portal through which one enters into the inner world of the subject. CT does this by asking the question, “What do you want through this (behavior or intermediate outcome) that is even more important?” The initial outcome that emerges as a response to the above-mentioned question is more important than the behavior that seeks to evoke it and is centered on an inner feeling or experience. Each successive level generates a state that is more general and more focused on positive affect. As the scope of the affect broadens, it becomes less definable and more numinous. These more global and general affective states (intermediate outcomes) are less tied to specific stimuli, contexts, or categories and become increasingly impactful as they unfold into the Core States. The phrasing of the questions gives a focus and direction that leads to deeper and more encompassing positive states that culminate in the experience of Core States. These Core States provide an inner experience of fulfillment, wonder, and connection that is capable of reorganizing the participant’s preference hierarchy. In reversing the outcome chain, the intermediate outcomes are *out-framed* and integrated into the Core State experience whereas behaviors or intermediate outcomes that are inconsistent with the felt tone of the Core State

experience tend to be negated. (personal communication, R. Gray, October, 25, 2015). This is in line with Prochaska's (1994) strong principle of change.

Strengths, Limitations, Future Directions, and Counseling Implications

Strengths of the study

This research design helped to identify incidents of testing and experimenter effects, in addition to treatment effects. The multiple baselines with 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 on-going therapeutic effect over time. The within-group norms approach directly 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.

Limitations of the study

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. Lastly, 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 would need to explore the effects of multiple sessions of CT as well as including clinical populations and exploring the effects of CT on specific disorders. CT has shown itself in this study to be useful in fostering psychological maturity and overall wellbeing.

If people were to adopt CT as a psycho-spiritual practice, similar to meditation and Centering Prayer (cf. 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 used by CT and other single-session therapies that facilitate such robust effect-size improvements.

Implications for Counseling.

As mentioned earlier, this particular group of research participants brought a wide range of issues to the CT session – depression, anxiety disorders, adjustment issues, emotional regulation issues, relational difficulties, trauma, and other, less serious concerns. The issues that these participants brought are very 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 which require time limited treatment strategies.

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 getting them to dis-identify 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." 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.

Each client comes with their unique world view, 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 world view 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 multi-cultural.

In addition to symptom reduction, building client resources is important in therapy. The CT protocol intertwines both these dimensions. The CT protocol is easily taught and can be assigned as homework for the client to practice between session. Through practice, CT helps to elicit ever more positive intermediate outcomes and finally access profoundly resourceful Core States. These Core States both provide the energy to transform the presenting problems and provide impetus for greater well-being and growth. 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 (cf. scores in Emotional Stability). These are the kinds of improvements that are dear to the hearts of counselors.

Finally, self-care is an absolute requirement for counselors and all 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 wellbeing.

Conclusion

The present study has made an important contribution in providing empirical evidence on the clinical utility of the Core Transformation 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 have compared favorably with other multi-session approaches such as CBT, ISTDP, and MBSR. 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 also to enhanced quality of life. These findings support the CT approach and encourage its wider application in the field.

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Table 1
GroupWise Means and Standard Deviations for Three Measurement Times

Scale	Group 1						Group 2						Alpha Reliability		
	Time 1		Time 2		Time 3		Time 1		Time 2		Time 3		T1	T2	T3
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
IPIP															
Extra	30.00	6.51	30.98	6.01	30.86	5.12	30.00	6.76	30.45	7.14	30.74	6.51	.76	.78	.73
Agree	38.25	5.48	39.64	4.71	39.05	5.18	39.83	4.99	39.85	5.82	39.81	5.08	.72	.75	.73
Consc	36.32	6.36	38.31	5.51	37.51	5.30	36.69	5.83	37.06	5.59	37.59	5.78	.75	.74	.74
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
Imagine	34.20	5.45	35.53	4.72	34.58	5.22	34.45	6.39	34.26	6.21	34.59	6.22	.75	.74	.78
PILT	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	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

Initial Treatment: Group I n = 65; Delayed treatment Group II n = 64. Alpha reliability is for both groups combined at T1, T2, and T3.

Extra = Extraversion; Agree = Agreeableness; Consc = Conscientiousness; ES = Emotional Stability; Imagine = Imagination; PILT = Purpose in Life Test; GHQ = General Health Questionnaire – 12; PAS = Positive Affect; NAS = Negative Affect; ABS = Affect Balance (PAS-NAS); Rating = Rating Checklist (Global wellbeing)

Table 2

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

Measures	Within Group Changes over time								Between Group Effects at T2 <i>d</i>	
	Group 1				Group 2					
	TX Improve ^a Mean	<i>d</i>	Total Study ^c Improve	<i>d</i>	Control ^a Mean	TX Improve ^b Mean	<i>d</i>	Total Study ^c Improve		<i>d</i>
IPIP										
Extra	.22	.33	.20	.26	.07	.04	.06	.11	.17	.15
Agree	.25	.37	.15	.18	.01	-.01	.01	.00	.00	.24
Consc	.31	.52	.19	.26	.06	.10	.12	.16	.21	.27
Emo Stab	.38	.56	.61	.91	.10	.25	.31	.35	.44	.30
Imagine	.24	.38	.07	.08	-.03	.05	.08	.02	.03	.29
PILT	.27	.25	.32	.49	.11	.26	.33	.37	.53	.16
GHQ	-.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
Mean Outcome Change	.43	.46	.55	.63	.17	.30	.33	.47	.52	.31

Group I *n* = 65, Group II *n* = 64. *d* > .20 = small effect size, *d* > .50 = moderate effect size, *d* > .80 = large effect size

Note: ^a = Time 1 to Time 2; ^b = Time 2 to Time 3. ^c = Time 1 to Time 3. Only Group 2 has a control period. Scores are in z-score units and corresponding Cohen's *d*.

EmoStab = Emotional Stability; PILT = Purpose in Life Test; GHQ = General Health Questionnaire – 12; PAS = Positive Affect; NAS = Negative Affect; Rating = Rating Checklist (global wellbeing). Mean Outcome Change = Mean of absolute values of Emotional Stability, PILT, GHQ, PAS, NAS, and Rating Checklist (global wellbeing). Effect sizes calculated using the RStats effect size calculator (Daniel & Kostic, 2014)

Table 3 Significant and non-significant Within-group and Between-group changes on Outcome Variables

Measure	T1 to T2				T2 to T3				T1 to T3				T 2 (between groups)	
	Group 1		Group 2		Group 1		Group 2		Group 1		Group 2		<i>t</i>	Sig.
	<i>t</i>	Sig.	<i>t</i>	Sig.	<i>t</i>	Sig.	<i>t</i>	Sig.	<i>t</i>	Sig.	<i>t</i>	Sig.		
GHQ	-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
PILT	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	.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 T1 to T2, Group 1 received treatment. From T2 to T3, Group 2 received treatment. T1 to T2, T2 to T3, & T1 to T3 indicate within-group *t-scores*. The last column (T2) indicates the between group *t-scores* at Time 2 – this is a comparison between the Group 1 (treatment group) and Group 2 (control)

Group 1 *n* = 65, Group 2 *n* = 64

GHQ = General Health Questionnaire-12; ES = Emotional Stability – IPIP; PILT = Purpose in Life Test; PAS = Positive Affect Scale; NAS = Negative Affect Scale; ABS = Affect Balance Scale (PAS-NAS); Rating = Rating Checklist (Global Wellbeing)