

Reversals of Sudden Gains Made During Cognitive Therapy with Depressed Adults: A Preliminary Investigation

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Background: This study investigated sudden reversals during cognitive therapy (CT), through the comparison of “in-session” activity and “out-of-session” life events. **Method:** The sample comprised 20 clients who experienced sudden gains during CT for depression: 10 who subsequently suffered a reversal of this gain and 10 matched clients who maintained progress. Measures of client resistance and therapist responses were scored by judges from session transcripts and clients completed measures of life events and depression at each session. This enabled the Reversal and Non-Reversal groups to be compared during pre-sudden gain, pre-reversal or matched sessions. **Results:** No differences were apparent between the Reversal and Non-reversal groups or between the pre-gain and pre-reversal sessions in terms of client or therapist “in-session” activities. In the Reversals group, 6 out of 10 clients recovered their level of symptom improvement, following the reversal. Therapists showed higher levels of reflection and self-disclosure with clients who did not recover their symptom gain following the Reversal than with clients who did recover their symptom gain following the Reversal. **Conclusions:** The study is discussed in terms of the manner by which reversals can be more effectively measured and researched.

Keywords: Sudden reversals, sudden gains, depression, outcomes.

Introduction

Sudden gains were initially described as the occasions when depressed clients make precipitous and substantial symptom improvement, in single between-session intervals during a trial of cognitive therapy (CT) (Tang and DeRubeis, 1999). Subsequent studies have replicated the sudden gain phenomenon in routine practice and for differing disorders (see Hardy et al., 2005 for an example). However, all subsequent studies have illustrated sudden gains to be less stable than originally depicted. Whereas Tang and DeRubeis (1999) reported reversals in sudden gains in 17% of their 24 sudden gain clients, in other studies reversals have been reported in up to 57% of clients who showed sudden gains (Gaynor et al., 2003). The mechanisms dictating both sudden gains and reversals in CT are still unclear (Busch, Kanter, Landes and Kohlenberg, 2006) but are of great clinical importance, in terms of both safety and effectiveness. Three potential factors have been associated with reversals: client resistance or non-compliance, therapist response, and life events.

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Client resistance has been implicated in failure to respond in CT and has been associated with poor outcome (Beutler, Moleiro and Talebi, 2002). Bischoff and Tracey (1995) demonstrated that increased therapist directive behaviour (defined as statements that confront the client, or lead, direct or control the therapeutic dialogue) produce resistance in clients. Similarly, Mahalik (1994) detailed the therapist responses associated with greater levels of resistance, which included the use of closed questions and over-providing information. Negative life events are likely to maintain depression, whilst positive events may create rapid improvements in depressive symptoms and facilitate eventual recovery, through the action of “fresh start” events (Harris, Brown and Robinson, 1999). The study hypotheses were therefore; (Ho1) that clients experiencing reversals will have higher levels of resistance within pre-reversal sessions than in pre-sudden gain sessions or matched sessions of clients who do not experience a reversal; (Ho2) that greater levels of ineffective or directive therapist response will be evident in pre-reversal sessions for clients who experience reversals than in pre-sudden gain or matched, no reversal sessions; and (Ho3) clients who experience a reversal will experience a greater number of adverse life events pre-reversal compared to matched sessions of clients who do not experience reversals.

Method

Participants

All clients scored 22 or greater on the BDI (or 26 or greater on the BDI-II) at assessment and met the DSM-IV (APA, 1994) criteria for the presence of a major depressive episode. Participants consisted of the 20 clients identified by Hardy et al., (2005) as experiencing a sudden gain during CT. Ten clients experienced a reversal at some point during therapy following their experience of a sudden gain; in future text these clients are referred to as the “Reversals group”. Matched controls were derived from the remaining clients who experienced sudden gains but, crucially, no reversals. This “Non-Reversals” control group were matched on the following criteria: (a) session of sudden gain (± 2 sessions); (b) initial symptom severity measured using the BDI-II (± 5 BDI-II points); (c) sex; and (d) age. The Reversals group consisted of 8 females and 2 males, with a mean age of 31 years 8 months (age range 20–50 years), and a mean BDI-II score of 33.60 prior to therapy. The mean size of sudden gain for the Reversals group was a reduction in symptoms of 11.90 BDI-II points (range 8–17 BDI-II points), and the mean size of reversal was a gain of 9.60 BDI-II points (range 5–18 BDI-II points). The Non-Reversals group consisted of 6 females and 4 males, with a mean age of 39 years and 9 months (age range 24–49), and a mean BDI-II score of 32.30 prior to therapy. The mean size of sudden gain in the Non-Reversals group was a reduction of 14.20 BDI-II points (range 8–31 BDI-II points).

Identifying sudden gains and reversals

Sudden gains were defined using the Tang and DeRubeis (1999) criteria: (a) a difference between the pre-gain and after-gain BDI-II scores of at least 8-points (exceeding the reliable change index of 7.16 points for the BDI-II); (b) a nominally significant t -value [$t(4) \geq 2.50$, $p < .05$] comparing the three pre-gain scores with the three after-gain scores and (c) a nominally significant t -value [$t(3) \geq 3.00$, $p < .05$], if only two pre-gain or two after-gain scores were

available. Reversals were defined as a 50% reduction in symptom improvement, following sudden gain (Tang and DeRubeis, 1999).

Measures

The *BDI-II* (Beck, Steer and Brown, 1996) is a 21-item measure of depressive symptomology; clients completed the BDI-II prior to each session. *Life Events Questionnaire* (LEQ; Llewelyn, Elliott, Shapiro, Hardy and Firth-Cozens, 1988) measures life events through a brief written description and scaling of events occurring between sessions. *Client Resistance Scale* (CRS; Mahalik, 1994) measures resistance in psychotherapy sessions regardless of modality by clinical judges across 5 dimensions; opposing expression of painful affect, opposing recollection of material, opposing the therapist, opposing change, and opposing insight. *Helping Skills System* (HSS; Hill, 2004) categorizes therapists' verbal responses by clinical judges on 12 categories; approval/reassurance, closed questions, open questions, restatement, reflection of feelings, challenge, interpretation, self-disclosure, immediacy, information, direct guidance, and other. The HSS is a generic verbal response mode system and is not specific to any particular psychotherapy modality.

Session transcripts

For the Reversals group, the first and last 10 minutes of each therapy tape of each pre-sudden gain and pre-reversal session were transcribed. For the Non-Reversal group, the first and last 10 minutes of the pre-sudden gain session and a "matched" session were transcribed. To identify the matched session, each Non-Reversal client was matched with a Reversal client. The number of sessions between the pre-sudden gain and pre-reversal sessions were calculated and used to identify the "matched session" for each Non-reversal client. Cronbach's alphas for the CRS were satisfactory; Opposing Expression of Painful Affect, $\alpha.78$; Opposing Recollection of Material, $\alpha.95$; Opposing the Therapist, $\alpha.79$; Opposing Change, $\alpha.70$; Opposing Insight, $\alpha.72$. The inter-rater reliability of the HSS was good, $\kappa.96$. Data for all measures resulted in non-normal distributions, and therefore a randomization method of data analysis (RANOVA; Manly, 1991) was employed.

Results

No significant differences were found between the Reversal and Non-Reversal groups or between the pre-gain and pre-reversal sessions in terms of levels of client resistance and therapist responses; there was also no significant difference in resistance or therapist response over time between the groups. No significant interaction effects were found across the therapist or client behaviours. A significant interaction was found in relation to positive life events ($F = 4.12, p < 0.05$), with the Reversals group experiencing a greater frequency of positive life events pre-reversal, as compared to pre-sudden gain; this difference was not significant for the Non-Reversals group.

In the Reversals group, following the reversal, 6 out of 10 clients went on to recover their level of symptom improvement achieved after sudden gain by the end of therapy. Potential differences were investigated between identified "recovery" and "non-recovery" clients in the Reversals group. RANOVA demonstrated significant group effects for therapist behaviours of

reflection ($F = 9.06, p = 0.008$), self-disclosure ($F = 6.32, p = 0.04$) and other ($F = 5.65, p = 0.02$), with higher frequencies of these responses associated with the “non-recovery” clients. No significant differences were apparent for reported life events.

Discussion

These findings contradicted the hypotheses that client and therapist “in-session” behaviours and “out-of-session” external life events would be associated with reversals. The Reversals group experienced a significantly greater number of positive life events pre-reversal than pre-sudden gain. These results are intriguing and should be interpreted with necessary caution, due to the small number of life events actually reported. The results support the findings by Hardy et al. (2005) that sudden gains are not linked to life events but rather may be more of a reflection of clients’ psychological change processes (Goodridge and Hardy, 2009). The data support that reversals are not static phenomena, with 6 out of 10 clients recovering their symptom losses. Such temporary reversals may reflect clients going through an assimilation process (Stiles et al., 1990), whereby distress is naturally heightened in the early stages of accommodating necessary psychological change. The current preliminary evidence adds to findings by Tang, DeRubeis, Hollon, Amsterdam and Sheldon (2007) that sudden gain responders have a 74% lower relapse risk than non-sudden gain responders.

The Non-Recovery group received CT with greater levels of therapist reflection and self-disclosure: the latter factor is a therapeutic technique fraught with potential boundary violation issues (Palombo, 1987), but also at times associated with higher levels of client improvement (Barrett and Berman, 2001). The small sample size in the current study means that the results need to be treated with caution. The “in session” activity of the cognitive-behavioural therapists was achieved using a measure of helping suitable across the psychotherapy modalities. The appropriateness of such a generic measure for indexing CBT specific helping is a potential confound and CBT-specific helping process measures need to be developed and validated. Reversals were defined using the extant standard (Tang and DeRubeis, 1999); whether this criterion captures true reversals or merely vacillation in assimilation processes needs to be addressed. The existing reversal criterion may mean that the size of reversals identified does not exceed the benchmark for a clinically reliably negative change; a “false positive reversal”. It is proposed that the definition of reversals should incorporate the concept of negative reliable clinical change (Jacobson and Truax, 1991) in order to clearly identify reversals from assimilation, and thereby facilitate further, more detailed and valid investigations. Continued investigations into sudden gain reversals are necessary to further understanding of how CT techniques and processes can be maximized to ensure client progress.

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