

Brief report

Level and perceived stability of self-esteem prospectively predict depressive symptoms during psychoeducational group treatment

John E. Roberts*, Anne M. Shapiro and Stephanie A. Gamble

State University of New York at Buffalo, USA

Objectives. To investigate the combined roles of level and perceived stability of self-esteem in prospectively predicting depression.

Design. Symptoms of depression and anxiety were measured both before and after psychoeducational treatment for depression; level and perceived stability of self-esteem were measured before treatment.

Method. Participants were 26 adults (16 female), age range 21–75 years.

Results. More stable self-esteem was associated with greater depressive symptomatology at treatment completion, particularly among participants who began treatment with the lowest self-esteem. Effects were specific to symptoms of depression in contrast with anxiety.

Conclusion. These results suggest that a stable, well-consolidated negative self-concept is associated with prolonged depression and a poor response to psychosocial interventions.

Recent theory and research suggests that overall level and stability of self-esteem (SE) are distinct dimensions that may be relevant to the course of depressive disorders. In terms of level of SE (i.e. high vs. low SE), there is only mixed evidence that low SE prospectively predicts the onset of depression, but several studies have found that clinically depressed individuals with relatively low SE tend to have more prolonged episodes compared with those with higher SE (e.g. Brown, Bifulco & Andrews, 1990). This work suggests that low SE serves to maintain depression. Stability of SE refers to the magnitude of short-term fluctuations in SE. Several prospective studies have found that SE instability predicts the onset of subclinical depressive symptoms, particularly in response to stress (e.g. Roberts & Gotlib, 1997). Initially asymptomatic individuals with unstable SE tend to develop more depressive symptoms following stressful life events than those with stable SE (see Roberts & Monroe, 1999 for a review). However, no studies to date have examined SE stability among individuals seeking treatment for depression. Research examining

* Requests for reprints should be addressed to John E. Roberts, State University of New York at Buffalo, Department of Psychology, Park Hall, Box 604110, Buffalo, New York 14260-4110, USA (e-mail: robertsj@acsu.buffalo.edu).

treatment response is important because it potentially provides insight both to investigators, who are interested in processes that serve to maintain depressive disorders, as well as to clinicians, who are concerned with targeting those same critical psychological processes in therapy.

The present study was designed to investigate the combined roles of level and perceived stability of SE in prospectively predicting change in depressive symptoms among individuals participating in group psychoeducational treatment for depression—the ‘Coping With Depression Course’ (Lewinsohn, Antonuccio, Steinmetz & Teri, 1984). This 12-session intervention is designed to teach participants cognitive-behavioural skills to alleviate depressive symptoms, and has been shown to be effective for individuals with mild to moderately severe episodes of depression. In terms of depressed individuals seeking treatment, perceived stability of SE probably reflects a stable, well-consolidated negative view of self. Perceptions of stable low SE could contribute to the maintenance of the disorder and hinder recovery, whereas unstable SE might reflect an openness to the possibility of seeing oneself in a more favourable light and be associated with a greater likelihood of recovery.

Method

Participants and therapists

Treatment was provided to an initial sample of 27 individuals. One person discontinued treatment after the first session, leaving a final sample of 26 participants (17 female), age range from 21–75 years ($M = 40.0$, $SD = 14.0$). The Structured Clinical Interview for the DSM-IV (SCID; First, Spitzer, Gibbon & Williams, 1995) was used to determine the presence of Mood Disorders. Seventeen of these individuals met DSM-IV criteria for current or past major depressive disorder; the remainder either met criteria for dysthymia ($N = 3$), minor depression ($N = 4$), substance-induced mood disorder ($N = 1$) or no diagnosable mood disorder ($N = 1$). Treatment attendance was high; 92% of all sessions were attended and no participant missed more than three sessions. Therapists were graduate students in clinical and counselling psychology under the supervision of the first author.

Measures

Pre-treatment depressive symptomatology was based on the mean of scores on the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock & Erbaugh, 1961) measured at an intake assessment (within 3 weeks prior to treatment) and at the first treatment session; post-treatment depression severity was based on the mean of scores on the BDI measured at the final treatment session and at a follow-up clinical evaluation (1–3 weeks after the final treatment session). Likewise, pre- and post-treatment symptoms of anxiety were based on the mean of scores on the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown & Steer, 1988) measured at the same time points. Level of SE was based on the mean of scores on the Rosenberg Self-Esteem Inventory (Rosenberg, 1979) measured at the intake and the first treatment session. Mean values were used to improve the reliability of these measures. Perceived stability of SE was measured with the 5-item Stability of Self Scale (Rosenberg, 1979) completed at intake. Example items include: ‘Some days I have a very good opinion of myself; other days I have a very poor opinion of myself,’ and ‘Does your opinion of yourself tend to change a good deal or does it always continue to remain the same?’

Results

Although females ($M = 19.4$, $SD = 7.5$) reported more severe pre-treatment depressive symptoms than males ($M = 11.9$, $SD = 5.4$), $t(24) = 2.67$, $p < .05$, gender

differences were not statistically significant on any other measure. Age was not significantly correlated with any variable except for perceived SE stability ($r = .35$, $p = .08$; two-tailed). Older participants reported more stable SE. The 10 participants who were taking anti-depressant medications were not significantly different on any of the measures included in this study from the 16 who were medication-free (all t values < 1.56), including severity of pre-treatment and post-treatment depressive symptoms (t values < 1). Based on the whole sample, participants showed a decline in depressive symptoms over the course of treatment (pre-treatment $M = 16.8$, $SD = 7.7$; post-treatment $M = 8.5$, $SD = 8.5$), $t(25) = 4.96$, $p < .001$. Among individuals who were at least mildly depressed at intake ($BDI > 9$, $N = 21$), there was also a decline in depressive symptoms (pre-treatment $M = 19.2$, $SD = 6.4$; post-treatment $M = 10.1$, $SD = 8.7$), $t(20) = 4.49$, $p < .001$, with a within-subject effect size of 1.20.

To investigate individual differences in treatment outcome, a regression analysis was conducted by entering pre-treatment depressive symptoms at Step 1, level of SE and perceived stability of SE at Step 2, and the level \times stability interaction on the final step. Results indicated that the overall equation was significant, $R = .775$, $F(4,25) = 7.92$, $p < .001$. Furthermore, perceived stability of SE ($\beta = .53$, $p < .01$) and SE level ($\beta = -.48$, $p < .05$) each made significant independent contributions to the prediction of depressive symptoms at post-treatment (after pre-treatment symptoms were statistically controlled). Greater perceived stability of SE was associated with higher levels of post-treatment symptoms, whereas higher level of SE was associated with fewer symptoms. In addition to these main effects, the level \times stability interaction ($\beta = -.46$, $p < .05$) made a significant contribution. The form of this interaction was investigated by examining the effects of perceived stability of SE separately in relatively high and low SE participants (based on a median split). Among participants with relatively high SE, perceived stability of SE showed a non-significant effect ($\beta = .00$, *ns*). In contrast, among individuals with relatively low SE, perceived stability of SE showed a powerful effect ($\beta = .85$, $p < .001$): individuals with stable low SE tended to remain depressed over the course of treatment. Importantly, these results were not driven by unduly influential data points (Cook's Distances all < 1). Furthermore, each of the main effects and the interaction term remained significant when age and sex were statistically controlled, and also when BDI items potentially reflecting SE (items 3, 5, 7, 8 and 14) were excluded. Parallel analyses predicting change in symptoms of anxiety resulted in non-significant effects for both level and perceived stability of SE, as well as their interaction. Furthermore, when pre- and post-treatment BAI scores were controlled statistically by simultaneously entering them at Step 1 of the regression analysis (with pre-treatment depressive symptoms), the main effects of level and stability of SE remained significant predictors of post-treatment depressive symptoms, and their interaction term showed a trend towards significance ($p = .15$). These latter results suggest that level and perceived stability of SE are uniquely predictive of symptoms of depression as opposed to anxiety.

Discussion

Results indicated that psychoeducational group treatment was effective for the sample as a whole. The within-participant effect size of 1.20 for initially depressed participants is comparable to effect sizes reported in other studies using cognitive-behavioural treatments for depression in general and psychoeducational treatment in particular (Cuijpers, 1998). More interestingly, level and perceived stability of SE accounted for significant variance in treatment response. Our findings suggest that stable SE, which seems to act as a resilience factor among non-depressed individuals (see Roberts & Monroe, 1999 for a review), has pernicious consequences for depressed individuals seeking treatment; individuals who began treatment with low SE that they perceived as stable tended to be treatment-resistant and remained depressed throughout the treatment programme. Depressed individuals whose stable views of themselves involve chronic, unmitigated, low, SE appear to be far less able to benefit from this intervention than those whose negative self-images are unstable and open to revision. Interestingly, the main effects of level and perceived stability of SE were specific to symptoms of depression and remained significant when symptoms of anxiety were controlled statistically. Likewise, the level \times stability interaction showed a trend towards significance ($p = .15$) when symptoms of anxiety were controlled statistically.

Unfortunately, our study was not designed to demonstrate the exact mechanisms involved. It is possible that individuals who see themselves as having stable negative self-images were less compliant with this homework intensive intervention, or perhaps as a result of unfavourable social comparisons with other group members they were less engaged in the group process. Unfortunately, homework compliance and level of group participation were not assessed systematically. It is also possible that perceptions of stable low SE reflects more ingrained negative self-schemata that are resistant to the cognitive change components of psychoeducational treatment. It would be useful for future studies to explore the correspondence between perceptions of stable low SE and negative schemata that are assessed through experimental cognitive psychology paradigms, such as incidental memory and emotional Stroop tasks, or through the frequency and intensity of negative self-statements and attributional style.

One limitation of the present study is that SE stability was based on a self-report measure of individuals' perceptions of how much their SE fluctuates over time. Two previous studies have found that perceived stability of SE shows only slight correspondence to actual fluctuations in SE estimated from the standard deviation of repeated assessments of SE over time (Kernis, Granneman & Barclay, 1989, 1992). It may be that perceptions of (in)stability are based on reactivity to positive and negative daily events, rather than on simple fluctuations that do not take into account these environmental changes (see Butler, Hokanson, & Flynn, 1994). On the other hand, in the context of depressed individuals seeking treatment, perceived stability of SE might reflect hopelessness about benefiting from treatment and low self-efficacy—'I'm not capable of changing and I'll always feel bad about myself'. Future investigations need to replicate these findings using daily assessments of SE and events over an extended period of time, as well as measures of hopelessness and self-

efficacy. Furthermore, the small sample size of the present study mandates that these findings be replicated in other (preferably larger) samples. Finally, future work should explore whether or not low SE that is perceived as stable is associated specifically with treatment resistance during psychosocial or, more specifically, group psychosocial interventions versus being associated with persistent and prolonged depression independent of any particular treatment. The latter would suggest that these aspects of SE play a core role in the ongoing maintenance of depression.

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Received 25 January 1999; revised version received 28 May 1999