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Does Behavioural Activation Lack Credibility Among Those Who Need It Most? A Comparison of Responses to Rationales for Behavioural Activation and Schema Therapy

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Background: Behavioural activation (BA) is an effective front-line treatment for depression but some consumers find it unattractive or aversive, and its rationale unconvincing. **Aims:** To investigate whether individual differences in symptoms of depression, borderline personality pathology or adverse childhood events would: (1) influence ratings of BA treatment credibility; (2) predict credibility rating differences in comparison to schema therapy (ST) exemplifying a contrasting theoretical rationale with a significant developmental history focus; (3) a third aim was to test whether BA credibility was increased by providing research evidence of its efficacy. **Method:** In an online within-subjects experiment, 219 Australian community adults completed the Credibility/Expectancy Questionnaire following written descriptions of BA and ST (presentation order randomized across participants), and again for BA after receiving information about research supporting BA's efficacy. **Results:** Higher childhood adversity (but not severity of depression or borderline personality disorder symptoms) predicted lower BA credibility. Overall, ST was rated more credible than BA, but presenting BA evidence increased BA credibility ratings to match ST. This response was moderated by individual differences: participants with higher childhood adversity or previous therapy experience found ST more credible than BA even after receiving BA evidence. **Conclusions:** Individuals are not equally receptive to BA. Presenting research evidence is an effective strategy for increasing credibility, but additional intervention or tailoring the rationale is recommended for clients with significant childhood adversity.

Keywords: behavioural activation, rationale, schema therapy, treatment credibility

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Introduction

Depression is the largest cause of global disability. Although behavioural activation (BA) is an effective treatment for depression, BA evokes negative initial reactions among some depressed individuals. Objections to the BA rationale may include that depression is 'biological', and that BA is 'impossible', too simplistic, and asks individuals to be 'fake' (Martell et al., 2010). As direct-to-consumer (DTC) marketing of evidence-based psychological services develops, it is important to understand how consumers perceive psychotherapies and what influences treatment acceptability and preference.

There has been limited exploration of BA credibility. Because childhood adversity is recognized to increase the risk of occurrence and severity of adult depression, treatment rationales failing to address this association may lack credibility. For example, people who believe that childhood events cause depression react more negatively to a BA rationale than an insight-oriented rationale (Addis and Carpenter, 1999). The influence of depression severity itself has been mixed, but remains potentially important.

This study was motivated by failed attempts to recruit depressed clients, who also screened high for borderline personality disorder (BPD), from our wait list into BA treatment programmes. Our aims were: (1) to explore severity of depression, borderline pathology and childhood adversity as predictors of BA credibility; and (2) to test whether a brief intervention providing research evidence increased BA credibility. We selected schema therapy (ST) for comparison, because its rationale contrasts starkly with BA, and it is an increasingly popular treatment option in Australia. We hypothesized that people with higher levels of depression severity, borderline pathology or childhood adversity would find BA less credible than ST.

Method

Participants

A convenience sample of 219 community adults (73% female, 67% aged 18–34 years, 51% living alone, 20% full-time employed, 41% tertiary educated) completed the online study, recruited via university notices and social media. Approximately half (55.3%) indicated previously receiving psychological treatment so this was explored as a potential moderator. Only three participants indicated having possibly received BA or ST.

Measures

The Credibility/Expectancy Questionnaire (CEQ; Devilly and Borkovec, 2000) sums seven items rated from 0 ('not at all') to 10 ('extremely'). Internal consistency was excellent for each rationale ($\alpha = .92$ to .95). Depression severity was measured with the Patient Health Questionnaire (PHQ-9; Spitzer et al., 1999), childhood adversity with the Adverse Childhood Experiences Checklist (ACE; Felitti et al., 1998), and BPD with the McLean Screening Instrument for Borderline Personality Disorder (MSI-BPD; Zanarini et al., 2003). To check for knowledge of BA and ST, participants were asked if they knew of, or had received, any psychological therapies in the past, and if so, to describe them.

Design and procedure

The BA rationale was derived from a published similar study (Ophir and Mor, 2014) and our ST rationale was written to match its length and number of key points. A within-subjects

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experiment was conducted. Participants read BA and ST rationales, identified as 'X' and 'Y' (order randomized) and completed the CEQ following each. Participants then read a paragraph outlining research supporting BA, before again completing the CEQ for BA.

Results

ACE, MSI-BPD, PHQ-9 and past treatment were entered simultaneously in a linear regression predicting BA CEQ scores prior to presentation of supporting evidence. ACE was the only significant individual predictor ($B = –1.38$ [0.69], $t = –2.02$, $p = .045$): participants with greater childhood adversity found BA less credible.

Without adjusting for covariates or exploring moderators, there was a significant difference between CEQ scores for ST and BA before presentation of research support (F (1.38,297.33) = 21.41, $p < .001$, partial $\eta^2 = .09$). ST (mean = 55.5, $SE = 1.2$) was rated as significantly more credible than BA (mean = 46.9, $SE = 1.3$), F (1,216) = 28.1, $p < .001$, partial $\eta^2 = .12$. Similarly, BA credibility was significantly higher after presentation of supporting evidence (mean = 54.7, $SE = 1.4$; F (1,216) = 86.28, $p < .001$, partial $\eta^2 = .29$). There was no significant difference between CEQ scores of ST and BA following presentation of BA evidence.

We explored depression, borderline pathology, childhood adversity and past treatment experience as potential moderators of CEQ differences. There were no significant interactions between rationale differences and depression, or borderline pathology. There was a significant interaction between childhood adversity and rationale difference (F (12.7,291.0) = 3.13, $p < .001$, partial $\eta^2 = .12$). To help interpret this interaction, ACE was categorized into three levels ('no ACE', '1 to 3 ACE' and '4+ ACE') based on evidence that experiencing four or more adverse childhood experiences was associated with higher risk for poor physical and mental health (Felitti et al., 1998). A 2-way repeated measures ANOVA was tested on the categorical ACE (F (2.8,300.5) = 7.23, $p < .001$, partial $\eta^2 = .06$) and pairwise comparisons of means examined (Bonferroni corrected). Figure 1 illustrates the interaction. For participants reporting no childhood adversity, there was no significant difference between CEQ scores for BA (before supporting evidence) and ST (mean difference = –1.49, $SE = 2.8$, $p = 1.0$), and the presentation of supporting evidence increased the credibility of BA (mean difference = –8.8, $SE = 1.5$, $p < .001$). For those with any adverse childhood events, ST was more credible than BA prior to supporting evidence (ACE = 1–3: mean difference = –8.3, $SE = 2.5$, $p = .003$; ACE = 4+: mean difference = –17.3, $SE = 3.1$, $p < .001$). For those with 1–3 adverse childhood events, the provision of evidence increased the credibility of BA to equivalent levels as ST (mean difference = 0.15, $SE = 2.6$, $p = 1.0$). For those with four or more adverse childhood events, provision of evidence increased the credibility of BA (mean difference BA pre- *vs* post-evidence = –6.3, $SE = 1.6$, $p < .001$) but BA remained less credible than ST (mean difference = –11.0, $SE = 3.2$, $p = .002$).

There was also a significant interaction between rationale condition and having received previous treatment (F (1.4,300.7) = 12.0, $p < .001$, partial $\eta^2 = .05$). CEQ scores for BA prior to receiving supporting evidence were no different between those with and without past treatment (mean difference = –3.4, $SE = 2.6$, $p = .20$). However, ST was rated as significantly more credible than BA by those who had previously received treatment (mean difference = –13.5, $SE = 2.1$, $p < .001$), but not by those who had not (mean difference = –2.6, $SE = 2.4$, $p = .82$). The provision of evidence supporting BA increased its credibility within both groups (no previous treatment: mean difference = –9.0, $SE = 1.3$, $p < .001$; previous treatment: mean

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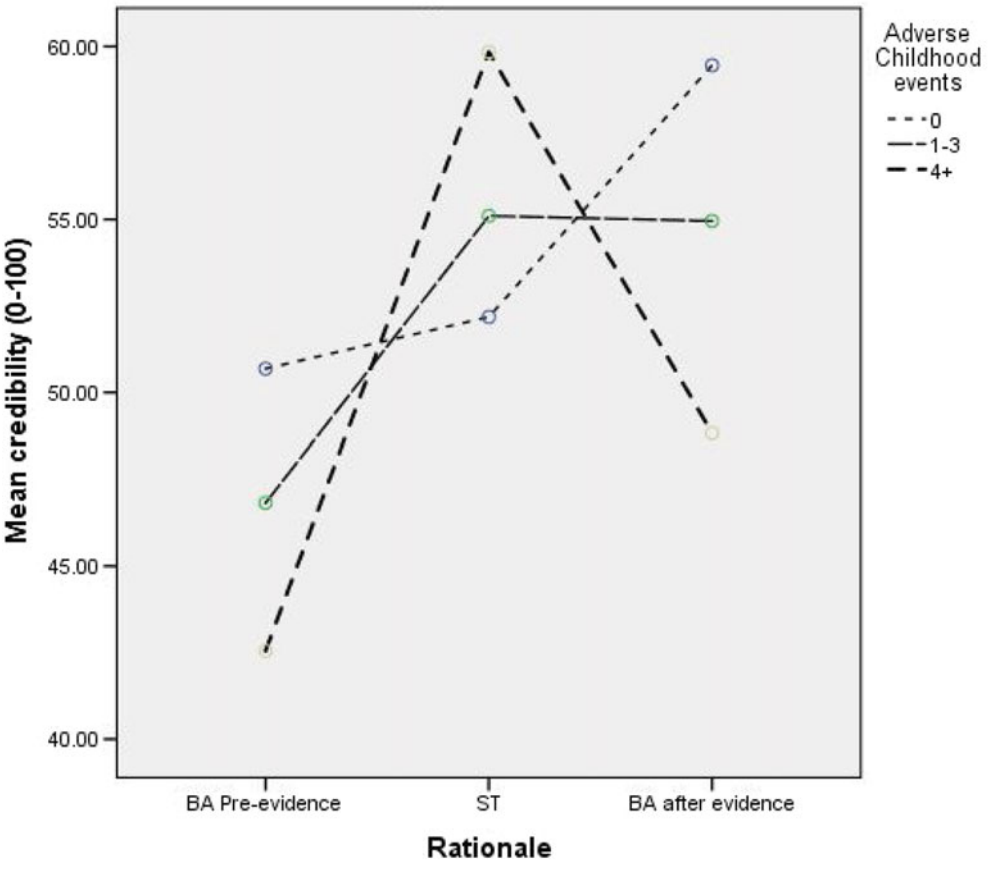

Figure 1. (Colour online) Childhood adversity moderates the credibility of behavioural activation rationales before (BA Pre-evidence) and after (BA after evidence) receiving information about supporting evidence and schema therapy (ST) rationales.

difference = –6.8, $SE = 1.1$, $p < .001$). However, for participants with previous treatment experience, ST remained more credible than BA (mean difference = 6.7, $SE = 2.3$, $p = .01$), whereas BA became more credible than ST for participants without treatment experience (mean difference = –6.4, $SE = 2.5$, $p = .03$).

Discussion

Many clinicians may routinely provide research evidence to bolster BA credibility, but if not, our results support this practice. Furthermore, research evidence can easily be incorporated into DTC marketing campaigns, potentially motivating people not currently accessing services to do so. However, our findings also suggest that BA credibility may depend on whether the individual has a history of significant childhood adversity, echoing other research finding more negative reactions to BA, and greater credibility for psychodynamic explanations, among those

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who endorse childhood reasons for depression (Addis and Carpenter, 1999). Given that text presentations of BA vary from an arguably reactance-inducing 'stop worrying about your inner child and develop your outer adult' (Addis and Martell, 2004, p. 78) to versions that acknowledge life events in case formulation, clinicians are advised to tailor their BA rationales to acknowledge clients' histories. Proponents of BA might consider what makes ST attractive; develop rationales acknowledging the influence of childhood experiences on depression; and explain how changing current activities may address maladaptive childhood patterns and thus meet clients' needs.

Several hypotheses were not supported. Consistent with BA's demonstrated efficacy with severe depression, self-reported symptom severity did not influence BA credibility, although very severe depression was rare in this sample. Furthermore, we did not find the association between BPD traits and aversion to BA observed within our wait list. However, our clinic did not routinely collect ACE data at referral. It remains possible and indeed likely that childhood adversity might explain their lack of engagement with BA.

Our study is limited by its sample. To maximize privacy, we did not ask whether participants were university or psychology students, who might be better informed about psychotherapies. Females were over-represented: older people, men, people from diverse cultural and linguistic backgrounds, and people with severe depression were under-represented. This sample was not specifically seeking treatment, hence these results will be of most interest to clinicians seeking to engage depressed people not already in treatment. Additional research is required before these results can be generalized to consumers actively seeking help.

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Supplementary material

To view supplementary material for this article, please visit https://doi.org/10.1017/S135246581800067X

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