

A Case Series Evaluation of a Brief, Psycho-Education Approach Intended for the Prevention of Relapse in Bipolar Disorder

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Abstract. The development of a brief psychological intervention aimed at clinicians without high levels of bipolar disorder expertise was described, and the manual based therapy was evaluated for feasibility with 13 bipolar diagnosed clients. Outcome was assessed using inventories related to central concerns with the bipolar population including suicide risk (Beck Hopelessness Scale), perceived control over mood and other internal states (Perceived Control of Internal States Scale) and satisfaction with treatment (Client Satisfaction Questionnaire). Data from Visual Analogue Scales and research interviews were used to complement the main results. Significant improvements were observed on all measures and it is concluded that the evaluated treatment can have important effects on central aspects of the bipolar experience and that it can be a useful adjunct to pharmacological therapies. Implications for clinical practice and service provision are discussed.

Keywords: Psycho-education, cognitive-behavioural, reduced hopelessness, bipolar disorder.

Introduction

Bipolar disorder (BPD) is a debilitating, typically recurring and severe mental illness often occurring with serious secondary consequences in the form of suicidal behaviours, physical health problems and substance abuse (Goodwin and Jamison, 1990; Michalak, Yatham and Lam, 2004; Müller-Oerlinghausen, Berghöfer and Bauer, 2002; Scott and Todd, 2002). It is also clear that these problems are frequently confounded by impairments in occupational and

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social functioning more generally and that these impairments persist even when symptom relief has been achieved for a given person with BPD (Coryell et al., 1993; Dion, Tohen, Anthony and Waternaux, 1988; Tohen et al., 2003).

The standard treatment offered to patients remains prophylactic pharmacological interventions and a range of medications are being utilised with some success (Geddes, Burgess, Hawton, Jamison and Guy, 2004). However, the medical approach working in isolation has significant limitations at both symptomatic and functional levels, as illustrated by limited long-term effectiveness and non-adherence (Greenhouse, Meyer and Johnson, 2000; Huxley, 2002; Keck, McElroy, Strakowski, Bourne and West, 1997; Kessler, Rubinow, Holmes, Abelson and Zhao, 1997; Nilsson, 1999). For example, one longitudinal study reported a relapse risk of 37% after one year and 73% after five or more years for patients on continual mood-stabilizing medication (Gitlin, Swendsen, Heller and Hammen, 1995). Such findings illustrate the need for a biopsychosocial approach to treatment and psychological input seems a necessary adjunct to the medical interventions on offer. Unfortunately, the inclusion of psychological interventions in BPD treatment has been slow for various reasons, including psychologists' own historical reluctance to offer psychotherapy to this group of patients who were often perceived to be unable to benefit from such interventions (Fromm-Reichman, 1949).

This reluctance to offer psychosocial treatment to patients with BPD has dissipated somewhat in recent years and it is now much more common to see patients being offered Cognitive Behavioural Therapy (CBT), which is currently being evaluated by several research groups and is showing substantial promise (Lam, Hayward, Watkins, Wright and Sham, 2005; Lam et al., 2003; Michalak et al., 2004; Otto, Reilly-Harrington and Sachs, 2003; Gonzalez-Pinto et al., 2004). However, a typical course of CBT for BPD with weekly sessions lasts circa 6 months in total and requires an advanced level of training, which is unlikely to be found in an average multidisciplinary team (Scott and Todd, 2002). Thus it can be argued that the treatments being developed currently rely too heavily on staff time that is comparatively expensive, or of restricted availability, and that these treatments are therefore unlikely to be put into widespread practice in the publicly funded sector. From a public health standpoint it is therefore important to develop treatments that can be delivered by staff with relatively little training, using a limited number of sessions (see Wyatt and Henter, 1995, for a discussion of bipolar disorder's economic impact on society).

The Instability Model of BPD relapse

The above psychosocial consequences of BPD, together with the realistic demand from services for time- and resource-limited interventions, illustrate the need for a model of BPD relapse that: a) gives a clear conceptual framework for understanding how psychological, biological and social factors lead to relapse; b) gives guidance for which interventions/coping strategies should be utilized in a given set of circumstances. These aims appear to have been met by the Instability Model of BPD Relapse (Figure 1) as proposed by Ehlers, Frank and Kupfer (1988), and promoted by Goodwin and Jamison (1990).

The instability model of relapse provides an integrating framework for intervention strategies as diverse as family therapy and individual CBT because it assumes that there are four key mechanisms of relapse in individuals with a biological vulnerability to BPD. The four mechanisms, all characterized by dysregulation of biological systems (neurotransmitter or

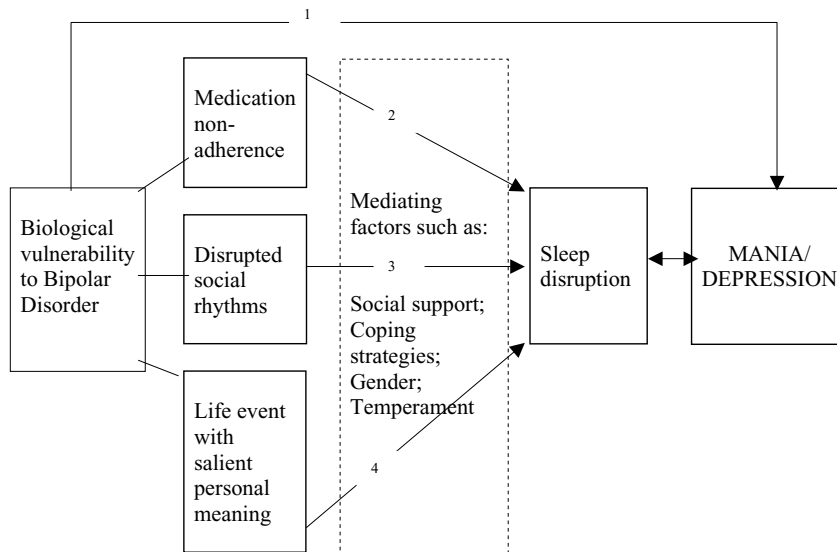


Figure 1. The instability model of relapse adapted from Ehlers, Frank and Kupfer (1988) and Goodwin and Jamison (1990)

neuroendocrine disturbance), are indicated by the numbers in Figure 1, which also illustrates that the mechanisms operate via the final common pathway of sleep disturbance. In brief, the instability model of BPD relapse proposes that an internal change in biological functioning can lead to early signs of relapse. Second, medication non-adherence can have a similar destabilizing effect on the individual's biological states. Third, social disruption may entail the initiation of circadian rhythm disruption, which in turn can cause the vulnerable individual to relapse. Finally, the biological dysregulation may be caused by stress following on from the perception or interpretation of salient life events (as described in Beck's cognitive model).

The instability model of BPD relapse has been used to argue that each of the four individual mechanisms should be tackled with particular and separate interventions (early warning signs of relapse training for mechanism 1, psycho-education and adherence therapy for mechanism 2, interpersonal social rhythms therapy for mechanism 3, cognitive therapy for mechanism 4) (Scott and Todd, 2002). It is, however, clear that such an approach comes into conflict with the realities of available resources and skills in the average NHS service, and on the basis of these concerns, combined with a wider reading of the recommendations for psychosocial interventions with BPD (inspiration was in particular gained from: Bauer, 2002; Frank and Swartz, 2004; Gonzalez-Pinto et al., 2004; Goodwin and Jamison, 1990; Lam, Wong and Sham, 2001; Leahy, 2004; Malkoff-Schwartz et al., 1998, 2000; Miklowitz, George, Richards, Simoneau and Suddath, 2003; Otto et al., 2003; Perry, Tarrier, Morriss, McCarthy and Limb, 1999; Smith and Tarrier, 1992), the Sorensen Therapy of Instability in Mood (STIM) was developed by the first author.

The Sorensen Therapy of Instability in Mood (Sorensen, 2004)

The STIM is a four-session intervention (60 min per session with one week intervals) based around the collaborative development of a relapse prevention handbook that also, via its progressive development in treatment, provides the client with an individualized bio-psycho-social formulation of their BPD related experiences. As can be seen by the interventions superimposed on the instability model of relapse in Figure 2, the STIM targets all four pathways to illness (indicated by numbers in the figure), while also taking account of more general recommendations in the research literature (Bauer, 2002; Colom et al., 2003; Frank and Swartz, 2004; Goodwin and Jamison, 1990; Leahy, 2004; Miklowitz et al., 2003) that interventions with BPD should include:

1. Education about the disorder;
2. Collaboration with the therapist;
3. Inclusion of the patient's social environment in attempts to stabilize mood.

The STIM treatment manual (Sorensen, 2005) is specifically written in a manner that guides an inexperienced clinician through all the relevant areas and pathways to illness in a logical sequence, without imposing a particular understanding or relapse prevention plans on the clients, who are encouraged to develop skills, strategies and models of understanding that are personally meaningful to them.

Method

Design

The design of the study was informed by the MRC guidelines for the evaluation of complex interventions (MRC, 2000). Given the limited amount of research within the field of psychosocial interventions with BPD, a Phase 2 or exploratory design was chosen to explore: a) whether the intervention was effective in key domains of BPD, namely reducing feelings of hopelessness and improving perceived control over internal states; b) the likely size of effect following a time limited intervention; c) which components of the programme were important, and which not; d) some limited qualitative analysis to see whether individual feedback from participants supported the theoretical model outlined in STIM. The design chosen was a multiple case study approach, using a convenience sample from two different services, one inner city and the other rural.

The effectiveness of the STIM was evaluated using a single treatment condition with no controls, A-A-B-B-C-C design (where A = pre-treatment baseline; B = during treatment; C = post treatment follow-up). Participants completed pre, post and follow-up outcome measures and were tracked on relevant measures during treatment. The first author, who also conducted the therapies, took all measures and interviews and the inclusion of both qualitative and quantitative data collecting strategies was chosen partly in order to minimize any bias this may have introduced. As such, attention to the question of a potential bias due to the first author's multiple roles in the research was paid via triangulation/comparison of different types of data from multiple sources and data collection strategies. Also, explicit attention to potential sources of change external to the therapy was paid in questionnaires and interviews. (Bryman, 1992; Barlow, Hayes and Nelson, 1984; Yin, 2003). The main focus here is on the quantitative aspects of the evaluation and it is noted that data obtained from the interviews may be published

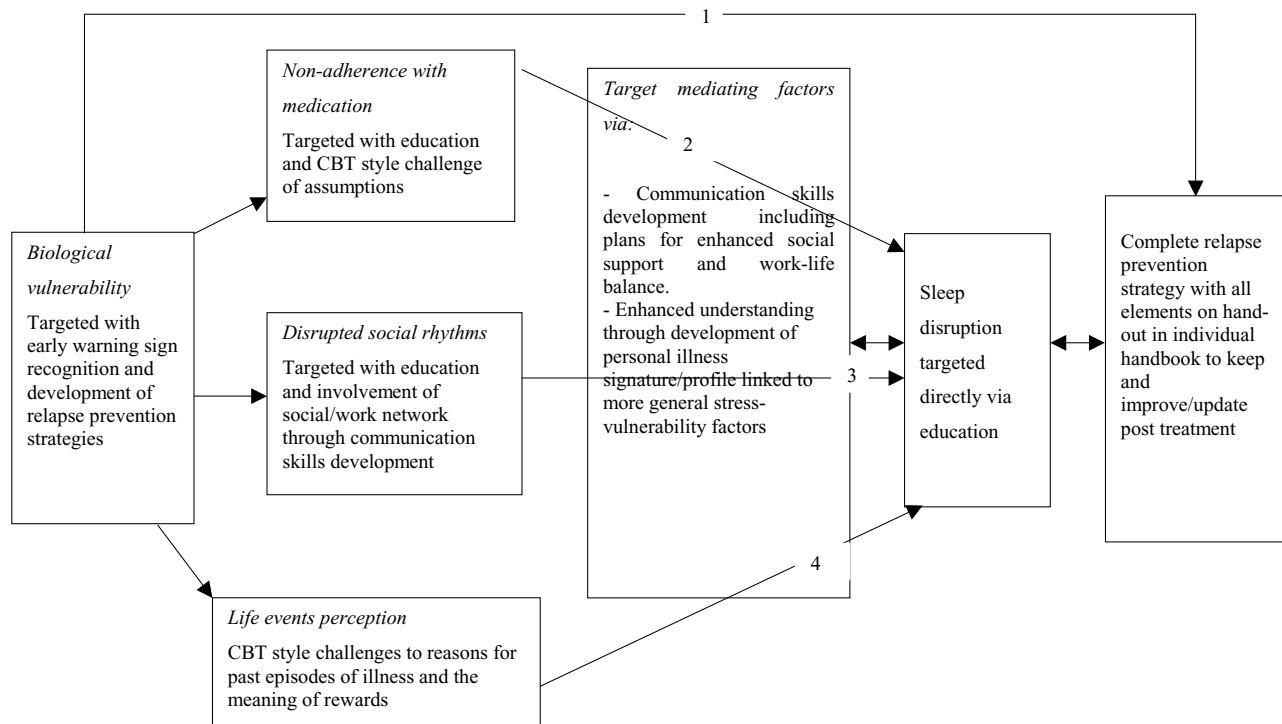


Figure 2. The Sorensen Therapy of Instability in Mood (STIM)

Table 1. The structure of the study with data collection points

Baseline, 2 weeks pre session 1	Baseline, 1 week pre session 1	Post session 1	Post session 2	Post session 3	Post session 4	Follow-up, 1 week post session 4	Follow-up, 5 weeks post session 4
BHS	BHS	Diary 1	BHS	Diary 1	BHS	BHS	BHS
CSQ-8	CSQ-8		CSQ-8		CSQ-8	CSQ-8	CSQ-8
PCOISS	PCOISS		PCOISS		PCOISS	PCOISS	PCOISS
	Interview		Diary 1		Diary 1	Interview	Diary 2
	Questionarie 1					Diary 1	
						Questionarie 2	

Note: BHS = Beck Hopelessness Scale (Beck, Weissman, Lester and Trexler, 1974); CSQ-8 = Client Satisfaction Questionnaire (Larsen, Attkisson, Hargreaves and Nguyen, 1979); PCOISS = Perceived Control of Internal States Scale (Pallant, 2000).

separately and support the findings obtained via quantitative measures. The data collection structure is illustrated in Table 1.

Participants

The majority of participants were recruited from existing waiting lists at two separate psychology departments and a smaller number of participants were recruited by approaching local consultant psychiatrists and GPs in the recruitment areas. In order to raise the likelihood that the study would have ecological validity, i.e. reflect the client base that an average clinician would see in daily NHS practice, participants were approached in the order they had been referred to the psychology departments and, for participants specifically referred to the study, in the order referrals were received. Once referred, one of the researchers (JS) met with each participant for an initial discussion to outline the nature of the study and to review the key features of their mental health problems. The main requirement for entering into the study were also described and discussed at this meeting. Each potential participant was then given a printed information sheet and a consent form and asked to return these by the end of the following week. Potential participants were invited to join the research if they:

1. Were fluent English speakers;
2. Indicated a willingness to do homework;
3. Had previously been given a diagnosis of bipolar disorder (type I or II) by the consultant psychiatrist, on the basis of DSM-IV-TR or ICD-10 criteria (American Psychiatric Association, 2000; WHO, 1992), and confirmed by the first author’s clinical judgement at the time of recruitment into the study, with reference to DSM-IV-TR criteria.

Participants were to be excluded if they:

1. Seemed to be at high risk for non-attendance due especially to some unrelated health problem, work or travel related difficulties;
2. Had known or suspected substance intoxication or withdrawal of sufficient severity to suggest that non-compliance was a strong possibility without prior intervention

specifically designed to enhance engagement. This follows the general recommendations by Gournay, Sandford, Johnson and Thornicroft (1997) and Drake et al. (1990) when working with the co-existence of mental illness and substance misuse problems (see also: Fuciec, Mohr and Garin, 2003; Lambert et al., 2005; Osher and Kofoed, 1989);

3. Had a history of a major neurological problem;
 4. Were in a manic state at the beginning of Stage B (commencement of STIM).
- None of the participants approached were excluded from the study.

Ten people found on existing waiting lists were approached and all opted to take part in the study. A further six people were referred by local psychiatrists and GPs. Of these, five showed up for their initial information session and all opted to participate in the study. Thirteen participants completed the treatment and the two who did not dropped out after the pre-intervention interview, following several failed attempts at finding a time that would allow them to take part in the study. Hence, all 13 participants who experienced the first treatment session completed the full treatment programme.

Regarding demographics, 6 participants were female and 7 male. The mean age was 42.6 years and the range 22–75 years. Nine participants described their ethnicity as White British, 2 as White Irish, 1 as White Other and 1 as Black British African. One participant had English as a second language. With regards to educational level, 2 participants had no educational qualifications, 5 had GCSE/O-level qualifications, 2 had A-levels or equivalent, 3 had a first university degree and 1 participant had a master's degree.

At the beginning of treatment 7 participants were in rented accommodation, 5 were homeowners and 1 was living with parents. At the conclusion of treatment this housing status had changed for one person who had left rented accommodation and become homeless (homelessness caused by social rather than mental health factors). During treatment, 2 participants had short spells on inpatient wards as a result of hypomanic and depressive episodes, but all were able to attend for sessions and to complete the full treatment programme on schedule.

Nine participants were in employment and 6 were in a stable relationship with a partner. The participants reported having experienced on average 17.85 episodes ($SD = 14.89$) of illness with a range of 3–54. Time since diagnosis was on average 9.62 years ($SD = 8.40$) with a range of 1–26 years.

Measures

The measures set out in Table 1 included the Beck Hopelessness Scale (BHS) (Beck, Weissman, Lester and Trexler, 1974). The BHS gives an indication of how the participants view their future prospects and has repeatedly been shown to be a reliable predictor of suicidal behaviour which, as mentioned above, is a central concern with the bipolar population (Beck, Rial and Rickels, 1974; Steer and Beck, 1997).

The Perceived Control of Internal States Scale (PCOISS) (Pallant, 2000) was adopted as a central measure because it assesses the participant's perceived control over internal states (emotions, thoughts and physical reactions), which is assumed to be a central aspect of the bipolar experience, and one that is likely to change as coping strategies are developed in treatment.

The Client Satisfaction Questionnaire (CSQ-8) (Larsen, Attkisson, Hargreaves and Nguyen, 1979) supplies a quantitative measure of the participants' satisfaction with treatment.

Apart from these standard, self completion measures, similar information on hopelessness, control and satisfaction, was obtained from weekly home completion "diaries", which included three individual visual analogue scales¹ (VAS) that provided measures of: i) feelings of hopelessness (indicating on a VAS how hopeful – hopeless they felt about the future); ii) confidence about their ability to control their symptoms; iii) satisfaction with treatment. These weekly diaries (and the slightly altered Diary 2 version given at 5 weeks follow-up) were used to triangulate and confirm the patterns of change observed on the main measures and also ask about the existence of any extra-therapeutic changes to participants' lives in order to gain information for the development, or ruling out, of extra-therapeutic or alternative explanations for any change observed throughout, or following treatment.

Procedure

During the initial session participants were given information about the study and were then asked to complete the measures mentioned in Table 1. Participants were also asked to complete the measures following the remaining weekly sessions. The 5-week follow-up was conducted by post.

Results

It is noted that baseline stability of the BHS and the PCOISS was established by paired samples *t*-tests² comparing the measurement points two and one week before the intervention began. A high degree of stability was found between these pre-intervention measurements, with BHS two-weeks pre-intervention scores ($M = 8.77$, $SD = 4.13$) and BHS one-week pre-intervention scores ($M = 8.08$, $SD = 4.48$), resulting in a non-significant *t*-test ($t(12) = 1.426$, $p < .179$). Equally for PCOISS scores at two-weeks pre-intervention ($M = 42.54$, $SD = 9.07$) and at one-week pre-intervention ($M = 43.08$, $SD = 9.33$) a non-significant mean difference was found ($t(12) = -1.620$, $p < .131$) showing stability of baseline measurement. In the following results, the mean of the two baseline measurements are used to get the most accurate basis for comparison with developments in the scores following treatment.

Hopelessness

Measures of hopelessness were obtained using the BHS, the relevant VAS and also through the conducted interviews. When comparing the mean baseline BHS score ($M = 8.42$, $SD = 4.22$) with the measurement taken one week post treatment ($M = 2.77$, $SD = 2.80$) a highly significant reduction in hopelessness is found ($t(12) = -6.853$, $p < .001$) leading to a large effect size, Cohen's $d = 1.34$.

¹The VAS is a continuous measure depicted on a 100 mm. horizontal line with end-points in accordance with what is measured (ex. very hopeless – very hopeful). It has a zero end-point and equal ratios between any two consecutive numbers and is thus a ratio scale.

²Due to the STIM's nature as a newly designed treatment, it was conservatively decided to let all *t*-tests be 2-tailed.

Table 2. 95% confidence intervals for the mean difference (M_d) of the BHS and the PCOISS at baseline and follow-up

	Baseline to 1-week follow-up	Baseline to 5-week follow-up
BHS	$2.75 \leq (M_d = 5.65)^{**} \leq 8.54$	$1.66 \leq (M_d = 5.33)^{**} \leq 9.01$
PCOISS	$-24.06 \leq (M_d = -16.11)^{**} \leq -8.16$	$-28.37 \leq (M_d = -20.46)^{**} \leq -12.55$

^{**} $p < .001$ compared to baseline.

This general result is sustained from baseline to 5-week follow-up ($M = 3.09$, $SD = 4.42$) for the 11 participants who could be contacted at that time ($t(10) = -5.217$, $p < .001$) with Cohen's $d = 1.44$. Further, as detailed in Table 2, the 95% – mean difference confidence intervals (CI) enables us, despite the small n , to conclude with some confidence that the differences in mean scores of the hypothetical populations behind the empirically obtained scores are to be found within the intervals indicated. Results derived from the hopelessness VAS in the home completion diary replicate these findings. Significant increases, in feeling more hopeful, were obtained between baseline and one week follow-up ($t(12) = 2.7$, $p < .02$) and again between one and 5-week follow-up ($t(10) = 2.5$, $p < .03$).

Perceived control of internal states

Measures of how much control participants perceive to have over their internal states were obtained using the PCOISS, the relevant VAS and were also explored in the conducted interviews. When comparing the mean baseline PCOISS score ($M = 42.81$, $SD = 9.18$) with the measurement taken one week post treatment ($M = 58.92$, $SD = 10.43$), a highly significant increase in the perceived ability to control internal states is found ($t(12) = 4.763$, $p < .001$), leading to a large effect size (Cohen's $d = 1.75$). This general result is sustained from baseline to 5-week follow-up ($M = 63.27$, $SD = 9.41$) ($t(10) = 6.372$, $p < .001$) with Cohen's d increasing to 2.42. This finding was replicated in the analysis of the home completed VAS for confidence in ability to control symptoms. Significant increases in reported control were found between baseline and one-week follow-up ($t(12) = -3.986$, $p < .002$) and again between one-week and 5-week follow-up, ($t(10) = -3.800$, $p < .003$).

Satisfaction and perceived usefulness of the intervention

The results reported above justify the conclusion that the STIM can effect positive change in hopelessness and perceived control over internal states, but in order to offer effectiveness and be a useful strategy in daily NHS practice, the treatment must also be resistant to high dropout rates. Apart from the noteworthy fact that none of the participants dropped out of the treatment, it is noted that this aspect of treatment is logically linked to client satisfaction and to the judgements about usefulness that clients make.

Data gained from the CSQ-8 at one-week follow-up ($M = 28.31$, $SD = 3.01$, Median = 29.00) and at 5-week follow-up ($M = 27.91$, $SD = 4.42$, Median = 28.50) fall in the high satisfaction range (27–32) as defined by Larsen, Attkisson, Hargreaves and Nguyen (1979). These results are closely mirrored by the VAS data for satisfaction and usefulness of the treatment but in order to ascertain the reasons for these positive ratings we must turn to the

interview data, which were analysed using a content analysis approach as set out by Kvale (1996) and Neuendorf (2002).

When looking in detail at the views of clients, it appears that elements of the STIM are of particular importance for satisfaction with treatment and that these treatment elements are further perceived to be causal for the positive changes experienced by clients during and after treatment. Based on this, it is argued that consideration of the following elements contained in the STIM should be made when implementing treatment with a bipolar disordered client:

1. Psycho-education about the disorder.
2. Development of an individualized relapse prevention handbook or other permanent record of the insights and skills developed in treatment.
3. Education about communication skills leading to inclusion of the client's social environment in the overall coping strategy.
4. Development of an individualized relapse prevention plan focusing on the identification of early warning signs and related strategies for reducing the risk of relapse. This entails the development of a personal early warning sign/trigger profile for illness episodes and identification of specific and personally meaningful coping strategies.
5. Collaborative, cognitive behavioural therapy-style working relationship in therapy.

Further, the content analysis also suggested that perceived usefulness, and hence treatment satisfaction, may be determined largely by the individual client's attitude to the prospect of future manic episodes. In relation to this it also transpired that improvements, as measured by BHS, PCOISS and related VAS scales, came about later in treatment for the participants who were positive/ambivalent about their experience of mania compared to those who were negative about it. The positive/ambivalent participants appeared to have a greater need to see the coping skills developed in therapy to be working in practice, before they experienced reduced hopelessness and perceived their control over symptoms to have improved. These are potentially important insights for treatment planning, whether within or outside of the framework of the STIM, and should inform the expectations that a practitioner holds for a particular client's rate of improvement. Thus, it may be reasonable to wait longer for improvements with clients who are positive/ambivalent about mania before a change in treatment strategy is considered, compared to clients who are clearly negative about having manic experiences, as they would be expected to show improvements later in the treatment process. Also, when working with a client who regards mania in a positive/ambivalent manner, it is likely to be of subjectively perceived most benefit and use to him or her to include practical tests of the skills developed, for instance in the form of planned applications of coping strategies when mood swings are encountered. This follows because these participants reported a greater need and preference for such "experiential" or practical interventions than did participants who were clearly negatively disposed to having manic episodes in future (see Lam, Wright and Sham (2005) for similar findings).

Discussion

The study confirmed the STIM's ability to achieve significant reductions in hopelessness and perceived control over internal states, which are central aspects of BPD. The significant changes in hopelessness found across the different scales and interviews are perhaps best summarized by noting that the 11 participants who could be contacted at the 5-week follow-up

went from a mean baseline score of 9.15 ($SD = 4.20$) on the BHS, which is defined as high risk of suicide (Beck, Brown, Berchick, Stewart and Steer, 1990) and “requires frequent, regular monitoring” (Williams, 1992, p. 105), to a mean score of 3.09 ($SD = 4.42$), which is comparable with the mean score of 4.45 ($SD = 3.09$) found in a normal population of 396 randomly selected adults (Greene, 1981).

Similarly, the improvements in perceived control over internal states observed through all data collection instruments and strategies can be illustrated by the PCOISS scores, which went from a mean of 42.32 ($SD = 8.68$) defined as in the low perceived control range (18–53) by Pallant (2000) to a mean of 63.27 ($SD = 9.41$) in the medium range just below what is defined as high perceived control (≥ 65) for a normal population sample of 439 adults (Pallant, 2000). Taken together these statistically significant changes form a convincing picture in fulfilment of Kazdin’s (1982) criteria for proven clinical significance, in that the problem areas have returned to the range defined as normal by reference to the background population.

On this basis and because no extra-therapeutic factors of importance were found, despite being actively sought in the interviews and in the diaries, it seems likely that the STIM has effected a significant and positive change in the four sessions allocated to treatment. A treatment that can have positive effects is only useful if it can obtain such results with the clients seen in daily practice and if these clients see it as useful enough for them to stay in treatment once they have decided to join. It is therefore a positive result in itself that the participants, who were mainly obtained through existing waiting lists to two different psychology departments, all completed the treatment. It is also important that the levels of satisfaction measured across the scales, in the questionnaires and in the interviews, were generally high. These findings, together with the demographic composition of the participants, give hope that the STIM can engage and keep a range of clients in treatment when applied in other, normal clinical settings.

When looking at the question of what participants believed to have instigated change and what they had found useful, it was noted that the elements of the STIM were frequently mentioned. It could be argued that this is based on a self-fulfilling prophecy in that these are the only treatment components that participants were exposed to. However, this would be to underestimate the critical, “consumer” sense of the participants, who were also able to identify other treatment elements as useful and as causal in positive change. Examples of this are the emotional atmosphere of treatment and the duration and structure of this.

As outlined above it can reasonably be concluded that the STIM can offer both efficacy and effectiveness and it is further noted that the manual is written in an explicit manner that allows staff with very little or no training to apply it with clients. It is also a short-term and therefore cheap intervention to offer, which is likely to appeal to hard-pressed psychology departments in many areas.

With regards to clinical implications, it was noted that differences might exist between clients who have a negative versus a positive/ambivalent attitude to the prospect of having manic episodes in future. It appears that the positive effects of treatment come about later in the treatment period for those clients who are positive/ambivalent about mania and that these clients may have a greater need to see skills developed in therapy working in practice before they experience reduced hopelessness and perceive their control over symptoms to have improved. These are potentially important insights for treatment planning, whether within or outside of the framework of the STIM, and should inform the expectations that a practitioner holds for a particular client’s rate of improvement. That is, it may be reasonable to wait longer for improvements with a client who is positive/ambivalent about mania before

a change in treatment strategy is considered, compared to someone who is clearly negative about having manic experiences. Also, when working with a person who regards mania in a positive/ambivalent manner, it is likely to be of most benefit to include practical tests of the skills developed, for instance in the form of planned applications of coping strategies when mood swings are encountered, in order to optimize treatment outcomes and the client's perception of usefulness and satisfaction with treatment.

Four major weakness of the study should be noted. Two key aims in the development of the STIM were: a) an intervention that can be provided by healthcare staff without formal training in cognitive therapy: b) the need to reduce the risk of relapse in patients with a history of bipolar disorder. Since the reported study was conducted by the clinical psychologist who developed STIM there is no evidence reported here that indicates that STIM can be provided with an adequate level of programme fidelity by staff of limited expertise (e.g. Moncher and Prinz, 1991). Thus a study comparing the fidelity of STIM against other cognitive-behavioural, or psycho-educational interventions, in typical mental health service settings, is required to evaluate whether this assumption can be supported. On the issue of relapse prevention, two participants did require brief rehospitalization (i.e. partial relapse) but nevertheless continued with STIM as outpatients following their one night stay on the ward, which succeeded in halting a full relapse into mania and depression. As such we have no means to assess whether STIM had any effect on severity of relapse, or whether it had an influence on remission (e.g. duration of hospitalization). Whether STIM can prevent, or reduce the severity of any relapse would require a longer follow-up period than was available to the research team at the time, and a more sophisticated way of measuring relapse than simply recording the number of hospital admissions. As such, the study cannot provide any evidence that relapse was affected one way or the other in those who participated. However, it does suggest that factors that are likely to be important in the prevention of relapse, namely reduced feelings of hopelessness, greater perceived control of internal states, and high consumer satisfaction with a service can be positively effected by the STIM. Finally, we were unable to use any systematic evaluation of patients to determine a formal diagnosis for bipolar disorder. These limitations indicate that a larger scale study with a follow-up period of 2 years (estimated to include most patients' normative time to relapse when actively treated with mood-stabilizing medications (Sachs, Lafer, Truman, Noeth and Thibault, 1994)) might now be worthwhile (i.e. cost effective).

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