The Adaptation of Cognitive Behavioural Therapy for Adult Maori Clients with Depression: A pilot study

Simon T. Bennett, Ross A. Flett, and Duncan R. Babbage

Massey University
Wellington, New Zealand

A semi-structured cognitive behavioural therapy (CBT) programme for depression was adapted for use with Maori adult clients with depression. Adaptations were developed in consultation with an advisory group consisting of Maori clinical psychologists and kaumatua with experience working in mental health services. The programme was piloted with 2 participants who were clients of a Maori mental health service. The programme builds on a more traditional CBT treatment programme by integrating concepts such as whakatauki, whanaungatanga, whanau involvement, and whakapapa into the therapeutic context. Despite limitations the results demonstrate considerable promise. Depressive symptoms increased substantially in both cases and both clients reflected positively on the adaptations incorporated into therapy.

Depressive disorders are among the most common psychiatric disorders with lifetime prevalence estimates ranging from 15 percent to as high as 25 percent (Kaplan, Sadock, & Grebb, 1998). Murray and Lopez (1997) described depression as the number one cause of disability worldwide. Further exacerbating this situation, rates of depression are increasing at epidemic rates with international prevalence data suggesting that depression is 10 times more prevalent now than it was in 1960 (Paradise & Kirby, 2005).

Mental illness has long been identified as one of the most significant threats to the health status of Maori and a leading Maori academic has suggested that due to the seriousness of this threat there was a need for the development of “innovative” public health measures and “appropriate clinical interventions” to better meet the needs of Maori clients (M. H. Durie, 1998). New Zealand mental health services have generally struggled to provide effective assessment and treatment to the Maori population perhaps best exemplified by the low rates of mental health service utilisation by Maori (Baxter, Kingi, Tapsell, & Durie, 2006).

Epidemiology of Depression

Until recently little has been known about the prevalence rates of various mental illness amongst the Maori population. Approximate estimations of prevalence have historically been gleaned from hospital admission data and suicide mortality rates, however it is widely acknowledged that this information has a range of limitations. Firstly, more common disorders such as depression and the anxiety disorders are more often managed within the community setting and do not require hospitalisation. Secondly, whilst a diagnosis of depression is the single most common factor shared by those who suicide, the majority of people with depression do not complete suicide.

Our understanding of prevalence within the New Zealand population was improved greatly in September 2006 with the release of the preliminary findings of Te Rau Hinengaro: The New Zealand Mental Health Survey (Oakley-Browne, Wells, & Scott, 2006). This large scale epidemiological study based on approximately 13000 interviews was commissioned by the Ministry of Health to examine the prevalence of mental illness in the general New Zealand population. One of the key objectives of this study was to describe the one-month, 12-month and lifetime prevalence rates of “major mental disorders” among New Zealanders over the age of 16.

The first significant point to emerge from this survey with regards to the prevalence of
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depression amongst the New Zealand population was that major depressive disorder was the most common single disorder in terms of lifetime prevalence (16%), and the second most common single disorder in terms of 12-month prevalence (5.7%).

Of particular interest to the researchers was the mental health profile of the Maori population. Consequently a process of ‘oversampling’ was employed whereby the number of Maori included in the sample was doubled compared with what would have been expected using a standard random sampling technique. Amongst the findings were that in comparison with the composite group comprising non-Maori and non-Pacific peoples and in comparison with Pacific people, Maori had higher 12-month rates of anxiety, mood, substance use and eating disorders. These differences remained after adjusting for age, sex and socioeconomic correlates (Baxter, Kingi, Tapsell, & Durie, 2006).

The debilitating nature of depression is reflected in the diagnostic criteria for a ‘Major Depressive Episode’ as defined by DSM-IV which includes symptoms such as depressed mood, loss of interest, feelings of worthlessness, suicidal ideation as well as physical symptoms such as fatigue, insomnia and weight loss (American Psychiatric Association, 1994). Psychiatric research findings have suggested that recurrent depressive episodes can have a negative and cumulative neurotoxic effect (Shatzberg, Garlow, & Nemeroff, 2002; Sher & Mann, 2003). Depression also comes at a considerable societal cost impacting at multiple levels including; the medical resources and professional expertise expended in treating depression, loss of earnings and reduced production due to work absenteeism, early retirement, and premature mortality (Berto, D'Illario, Ruffo, Di Virgilio, & Rizzo, 2000). Te Rau Hinengaro found that in New Zealand mood disorders caused the greatest disruption and interference with life as compared with other common mental health disorders.

Finally a pre-morbid diagnosis of depression has been found to be the single strongest correlate with suicide completion. This has considerable relevance to Maori as Te Rau Hinengaro found that Maori presented with significantly higher rates of suicidal behaviour than the non-Maori/non-Pacific group (Oakley-Browne, Wells, & Scott, 2006).

Treatment of Depression

A number of treatment options are available and routinely implemented for depression in its acute phase. These include a range of anti-depressant drugs and several empirically supported structured and time-limited psychological treatments. The majority of studies indicate that the most effective treatment for depression should involve a combination of psychotherapy and pharmacotherapy, although neither alone has also been found to be effective (Kaplan, Sadock, & Grebb, 1998). Of the psychological approaches available, cognitive-behavioural and interpersonal therapies have been identified as the ‘gold standard’ in the treatment of depression since the mid-1980s with an increasing volume of high quality empirical evidence supporting their use (Williams, 1992).

Cognitive-behavioural therapy (CBT) is a well established and widely used time-limited treatment for depression that evolved from Aaron Beck’s cognitive therapy (Beck, 1964). Over the years various forms of CBT have been developed by major theorists including Albert Ellis (1962), Donald Meichenbaum (1977) and Arnold Lazarus (1976). This work culminated in the publication of a key manual over two decades ago that integrated cognitive therapy with behavioural techniques in the treatment of depression (Beck, Rush, Shaw, & Emery, 1979). Cognitive-behavioural therapy employs a series of progressive interventions that target observable behaviour, dysfunctional automatic thoughts, and at the core level underlying cognitive schema.

Whilst a number of major studies have investigated and validated CBT as a highly effective treatment for depression, these studies have either not collected data related to ethnic identity, or lacked the statistical power to examine the response of ethnic minority groups to CBT due to their under-representation in sample groups (Miranda et al., 2005). In a supplemented report, the Surgeon General of the United States raised concerns that despite the

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existence of a range of treatments for mental disorder, minority groups were largely omitted from efficacy studies (United States Department of Health and Human Services, 2001). Sue and Zane (2006) state that the gap between research and practice is far more pronounced regarding our knowledge base of evidenced based practice and empirically supported therapies for racial and ethnic minority groups.

Criticism of CBT in relation to its appropriateness with minority groups has centred on a range of perceived deficiencies in the relevance of CBT among certain populations. For example the historically dichotomous relationship between science and spirituality is an area that has been identified by many as a barrier to the acceptability of CBT to certain populations. The importance placed on rational thinking, seeking objective evidence for thoughts and the reliance on empirical validation all suggest that CBT has its foundations firmly grounded in a scientific view of the world leading some authors to question the efficacy of CBT with clients who have more spiritually based beliefs (see for example Hirini, 1997; Organista, 2006).

In 1996 the Journal Cognitive and Behavioral Practice released a special issue entitled Ethnic and Cultural Diversity in Cognitive and Behavioral Practice (Iwamasa, 1996). In this issue, Organista and Munoz (1996) examine the utility of CBT with the Latino population and comment on the culturally competent application of CBT to this population. Amongst other suggestions the authors recommend judicious self-disclosure in early sessions on the part of the therapist including the sharing of background information such as where they are from, their families, and work they have done. This is an important aspect of the building of trust with Latino clients. They also advocate the integration of religion into work with traditional or religious Latino clients and reinforce church attendance and prayer as activities that help clients deal with stress and negative mood states.

Hirini (1997) raised several concerns regarding the degree of congruence that cognitive behavioural therapy shares with a Maori worldview. Amongst other things, he cited the example that the promotion of assertiveness and independence may be a less relevant indicator of healthy social functioning among Maori. Hirini’s sentiments are further highlighted by the well known Maori whakatauk, ‘kao re te kumara kore mo tona reka’ which emphasises the importance placed on modesty and understatement within Maori society.

Based on a review of the literature Miranda et al (2005) strongly encouraged clinicians to provide evidence based care to ethnic minority populations emphasising the importance of “tailoring” this care to make it sensitive and more acceptable to the culture of the individual receiving treatment.

The incorporation of Maori customs and practices into more traditional approaches to therapy has been both aspired to and encouraged for many years. However, the lack of empirical evidence supporting the integration of innovative therapeutic techniques when working with Maori represents a dilemma of sorts for the discipline of clinical psychology. The foundation of clinical psychology and perhaps its key point of difference as compared to other helping professions is the strong emphasis on utilising empirically validated and proven methods.

This pilot study aims to make some preliminary steps in addressing this dilemma. The initial phase of this pilot study is to develop a CBT treatment protocol for adults experiencing depression in consultation with a cultural advisory group consisting of experts in the field of CBT and its application with Maori clients. The second phase of the study will be to pilot the protocol with two participants who are experiencing symptoms of depression.

**Methodology**

**Protocol Development**

A semi-structured protocol was developed in consultation with a range of mental health professionals with considerable expertise in CBT and working with Maori in the field of mental health. These resource people consisted primarily of Clinical Psychologists of Maori descent however also included non-Maori Clinical Psychologists with experience and an interest in working with Maori. Additional resource people consulted were Kaumatua from Capital and Coast District Health Board (C&CDHB) and Hutt Valley District Health Board (C&CDHB) and Hutt Valley District Health Board (C&CDHB) and Hutt Valley
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District Health Board (HVDHB) as well as local Runanga groups representing Ngati Toa and Te Atiawa. These consultants gave advice on the types of adaptations they had used, found useful and would recommend when working with Maori clients as well as culturally appropriate research conduct.

This protocol is described in detail in a manual developed for this study however in brief the protocol consists of 12 sessions of cognitive behavioural therapy for the treatment of major depressive disorder. The treatment procedure whilst remaining structurally similar to that prescribed by Beck et al (1979) aims to incorporate a range of adaptations as recommended by the advisory group consulted as part of the protocol development.

Participant Recruitment and Treatment
All participants for this pilot study were tangata whaiora (clients) of Te Whare Marie, a community mental health service that services Maori clients living in the Wellington, Porirua and Kapiti regions. Inclusion criteria were adult clients (over the age of 18) with a primary diagnosis of depression who had not received CBT previously. Whilst many studies of this type have excluded those with comorbid mental health diagnoses, feedback from the advisory group suggested that this did not reflect the clinical reality of working with Maori. Subsequently inclusion criteria were relaxed to ensure that prospective participants with comorbid mental health issues remained eligible for inclusion providing they had a diagnosis of depression. Prospective participants who met the above criteria were introduced to the study by their community mental health case managers. These prospective participants were then given an opportunity to read information about the study and ask questions of the researcher. Those who were willing to participate signed a consent form and were contacted by the researcher.

The CBT treatment was provided by the researcher who is a Senior Clinical Psychologist of Maori descent. Participants continued to receive treatment as usual from their community mental health service throughout the course of the CBT treatment. In most cases this involved antidepressant medication and case management. All participants initially engaged in a 3-week baseline phase during which a series of psychometric measures were administered. The first eight sessions were held on a weekly basis and then sessions were shifted to fortnightly for the final four sessions. Follow-up data was collected 1 month and 6 months after treatment was completed.

Measures
A number of measures of both clinical and cultural relevance have been selected as part of a larger study. Constructs measured include automatic thoughts, attributional style, cultural identity, and well-being across the dimensions of Te Whare Tapa Wha. For the purposes of this pilot study the variation in the participants depression severity will be focused upon.

Beck depression inventory – 2nd edition (BDI-II).
The BDI-II is a 21-item self report measure with each answer scored on a scale ranging from 0 to 3. The cutoffs suggested by the authors to describe the severity of depression are: 0–13: minimal depression; 14–19: mild depression; 20–28: moderate depression; and 29–63: severe depression. The BDI-II has been shown to have a high one-week test–retest reliability (Pearson r =0.93), as well as high internal consistency (α=.91).

Results
These results will be presented in two sections. The first section will provide a brief summary of the outcome of the consultation process with a particular focus on the adaptations that were recommended by the advisory group. The second section will provide some preliminary single case study data regarding two of the initial participants to complete the treatment protocol.

The Adapted Protocol
Below is a brief summation of the specific alterations that were made to the protocol based on the feedback received from the groups consulted. Below is a list of the specific modifications that were integrated into the treatment protocol as well as a brief explanation.

• Extended use of Maori metaphor including whakatauki (Maori proverbs) to guide sessions. A series of appropriate whakatauki were identified that had relevance to

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• **Use of culturally relevant examples.** A series of vignettes were developed that had greater relevance to Maori client realities.

• **Referral to a Maori model of health (Te Whare Tapa Wha).** Participants were introduced and oriented to Te Whare Tapa Wha at an early stage of treatment as a means of considering their strengths and weaknesses in several dimensions. This metaphor of a whare was extended to the cognitive formulation stage and included analogies between early life experiences and the ‘foundation of the whare’ as well as coping/protective strategies and the ‘roof of the whare’.

• **Opening and closing session with karakia or whakatauki.** Sessions opened with karakia or whakatauki depending on the individual clients comfort with this process, and translations given.

• **Self-disclosure on the part of the therapist.** Specific and judicious self-disclosure by the therapist. Primary goal of this process to share whakapapa and establish connections with participant.

• **Extended use of visual stimulus.** The use of visual approaches to formulation and thought recording was extended whereby all thought records (from basic through to extended) were completed in a diagrammatic form.

• **Deeper exploration of whakapapa (genealogy) through the use of a genogram.** Use of a genogram in the initial sessions as part of the assessment process.

• **Encouraging whanau involvement in sessions and treatment objectives.** Participants actively encouraged to include appropriate whanau in treatment both as participants in treatment objectives and attenders of sessions.

• **Use of Maori language.** The use of Maori terminology and phrases where possible and appropriate both in general discussion during sessions as well as in CBT homework forms (e.g., activity schedules, thought records).

**The Case Studies**

**Case Study A**

Figure 1 below shows the progress of a 62-year-old male kaumatua who participated in the study in terms of the severity of their depressive symptomatology.

![Figure 1. 62 year old male participant](image-url)
Participant A progressed through treatment relatively successfully. His average BDI-II score during the baseline (no-treatment) phase of the protocol was 16.67 (mild depression range) and his scores ranged between the mild and moderate range for depression initially. During the treatment phase participant A’s score ranged between the minimal and moderate range due to one significant ‘spike’ as seen at assessment point 7 explained by an acutely stressful situation that arose for the participant during the course of therapy. Despite this his mean score during treatment of 6.58 (minimal depression range) was clearly lower than his baseline average. His post treatment average of 1.5 (minimal depression) also represented a substantial improvement as compared to his pre-treatment depression severity.
Case Study B

Figure 2 shows the progress of a 36-year-old female participant in terms of the severity of their depressive symptomatology as measured by the BDI-II.

Participant B’s average BDI-II score during the baseline (no-treatment) phase of the protocol was 45.00 (severe range) and her scores were consistently within the severe range for depression. During the treatment phase the severity of participant B’s depression fluctuated with a gradual downward trend through the first 9 sessions however her depressive symptoms reduced dramatically following session 10. Whilst this reduction in symptoms was instigated by a positive change in Participant B’s social context (the reconciliation of an important relationship) this change was mediated by a successful behavioural intervention discussed and planned as part of the treatment process. Her mean score during the treatment phase of 26.08 (moderate range) was markedly lower than her pre-treatment average and her post treatment average of 4.5 (minimal depression) represented a substantial improvement as compared to pre-treatment depression severity.

Discussion

Whilst the use of ‘imported’ therapeutic modalities (such as CBT) with the Maori population and in a New Zealand context has generated much dialogue and debate, this pilot study is the first piece of research that has sought to generate specific guidelines as to how CBT can be adapted to integrate relevant cultural constructs into the therapeutic package. It is also the first trial examining the clinical efficacy of CBT with Maori clients with any kind of disorder. Prior to considering the information generated as part of this study there are several limitations that should be acknowledged. The first issue relates to the limited level of control that can be maintained over a community based population over a time span of approximately 4-months. As illustrated in both Case Study A and Case Study B variables outside of the therapy context resulted in increases and reductions in severity of depressive symptoms for the two participants.

There are also issues of control more specific to this study related to the relatively broad inclusion criteria employed. In working with a community population a range of issues are inevitably encountered with regards to the limited level of control able to be achieved. Unlike larger scale studies that have been conducted into depression which have screened participants to include only relatively ‘pure’ cases of single disorders this study has accepted participants presenting with various psychiatric co-morbidity, providing that their primary presenting issue is that of a depressive disorder. Increasingly however a number of criticisms of this traditional approach to empirically supporting therapies have emerged including that this ‘sanitisation’ of research populations does not reflect the reality of clinical practice (Westen, Novotny, & Thompson-Brenner, 2004). The feedback from the consultation with the C&CDHB and HVDHB was unanimous in their assertion that applying restrictive and rigid criteria would eliminate almost all of the current consumers of their services. Additionally all of the participants were simultaneously receiving treatment from Maori mental health services while they were participating in the study. Some were receiving antidepressants treatment via a psychiatrist while others were having case management input from a social worker or community mental health nurse thus creating additional sources of variation.

Whilst the single case study design utilised has advantages there are limitations with the small sample size limiting the extent to which these results can be generalised to other cases. Because of the importance of forming a positive therapeutic relationship when providing CBT, variation is often observed between therapists. The treatment provided as part of the study was delivered by a sole therapist and therefore caution must be exercised in attributing treatment success or failure directly to CBT. Despite this the sole therapist aspect of the design might also be considered a strength as it controls for one of the largest sources of variation identified by other studies.

Another issue that manifested during the piloting of the treatment protocol, was the undoubted irony of delivering and adhering closely to a pre-ordained treatment protocol (in the interests of conducting a well controlled study), whilst simultaneously endeavouring to deliver a more culturally responsive therapeutic experience to depressed Maori adults. For example, neither of the individuals who participated in the pilot study chose to invite members of their whanau to any of their CBT appointments. This would become another source of uncontrolled variation should future participants elect to include whanau in the sessions. A decision was subsequently made in...
consultation with the advisory group to develop a less structured set of treatment guidelines.

As a result of the consultation process employed by this pilot study a series of alterations were made to a conventional CBT protocol for depression. These recommendations are outlined in the results section and included changes to both the structure and process of cognitive behavioural therapy. The notion that adapting a CBT treatment package to provide greater face validity when working with Maori, is in keeping with a growing body of international literature that has recommended adaptations to CBT when working with American Indians (McDonald & Gonzalez, 2006), Alaska Natives (Hays, 2006), Latinos and Latinas (Organista, 2006) and African Americans (Kelly, 2006) amongst other cultural groups.

There are undoubted parallels in the identified limitations of CBT in relation to other cultural groups and those identified by the consultation process employed by this study. McDonald and Gonzalez (2006) encourage therapists to incorporate the significance placed upon the concept of ‘spirituality’ when working with American Indian clients, a dimension that has long been acknowledged as critical to the identity of Maori (M. Durie, 1984; Hirini, 1997) and is also reflected by the inclusion of Te Whare Tapa Wha as a crucial formulative tool in the developed treatment protocol. Organista (2006) encourages “judicious self-disclosure” and “small talk” when initially working with Latino clients in order to put them at ease with the therapist as well as incorporating their “strong family values” into the counselling approach. Recommendations which emerged from the consultation with the advisory group conducted for this study, included a degree of self-disclosure (e.g., the sharing of whakapapa) and the inclusion of whanau in treatment objectives.

Based on the treatment outcome of the two participants involved in the piloting of this treatment protocol it can be inferred at the very least that CBT demonstrates considerable promise when utilised with Maori clients experiencing symptoms of depression. Both clients experienced substantial decreases in the severity of their post-treatment depressive symptoms. Furthermore participants expressed high levels of satisfaction with therapy and initial qualitative feedback from clients regarding their treatment included the following:

“I am now in a better position to analyse automatic thoughts which create negative moods”.

“It helped to think of the evidence for and against thereby allowing me to react in a more controlled proper way”

“The most important part of my treatment has been the CBT because for the first time... I was able to clearly understand what created moods leading to bad, violent behavioural patterns”

“It was good having someone put this stuff put into a Maori way of thinking”

“I really enjoyed working with a Maori counselor”.

“I really liked the whakatauki that we learnt, me and my son start each day now with ‘whakataka te hau....’”.

This feedback has undoubtedly given a level of face validity to the treatment protocol. Firstly it suggests that CBT can be an effective intervention for Maori clients with depression. The final three comments also provide tentative support for the adaptation of CBT and the integration of cultural variables to enhance the therapy process when working with Maori.

Further research will involve delivering the adapted CBT protocol to a larger group of Maori clients presenting with depression. This will allow further inferences to be made about the efficacy of adapting CBT for the Maori population.

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References


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