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Introduction to Special Section: Low Intensity CBT in Aotearoa New Zealand

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We are excited to introduce the Low Intensity CBT special section of the Journal. Over the past two decades there have been significant changes to the way in which mental health services are delivered in New Zealand. Many of these changes have been successful and we now live in a society where the population is generally more aware of mental health issues, more likely to seek and expect help, and less likely to stigmatise and exclude those who suffer from mental health problems.

However, despite obvious progress, public demand for more effective, accessible, and affordable psychological interventions continues to grow and there are population groups, such as Māori and Pasifika, who continue to experience relatively high levels of mental health problems. Our children have also been identified as a group needing far more support than is currently offered and, surprisingly, groups identified as having mild to moderate mental health problems also have difficulty in accessing the help they need. Depression is often referred to as the common cold of mental health disorders as the majority the population will have had direct or indirect experience of this condition. The experience of anxiety is also relatively common, especially for women. Less frequently diagnosed than depression, anxiety can seriously affect the quality of life and the productivity of individuals. In New Zealand, 16% of the population will have received a common mental disorder diagnosis at some point in their lives, and within this group Māori and Pasifika people will be over represented. It can further be assumed that many individuals "suffer in silence", in that they do not seek or receive any help or support.

The Dunedin Multi-Disciplinary Health and Development Study has also confirmed that individuals who experience mental health problems have more than twice the risk of premature death when compared to the general population (Poulton, Hancox, Milne, Baxter, Scott, & Wilson 2006). Physical health can be compromised by poor health choices made by the mentally ill, such as smoking or using substances to cope with anxiety symptoms or feelings of hopelessness. Socio-economic repercussions such as unemployment, poor housing, social isolation and discrimination are all common effects of mental health problems. Medication is most often prescribed as a first treatment option, and whilst this can be effective in the treatment of depression, the anxiety disorders present a more complex picture, and many individuals experience side effects, find medication compliance difficult, or do not respond to medication. When asked most individuals express a desire for psychological rather than pharmacological intervention (Elliot, 2017). However, the scarcity of specialist practitioners and fiscal restraints make it difficult to provide psychological intervention as first choice.

The Special Section aims to identify pathways which have the potential to lead to a more sustainable and available mental health service by asking if there is anything we can learn from international initiatives? We consider the introduction of low intensity psychological interventions as one possible pathway. Low intensity psychological interventions, most notably those which are CBT based promise the possibility of cost effective and brief evidence-based psychological interventions which can be delivered to a growing population of individuals suffering from mild to moderate mental health problems, such as depression and the anxiety disorders. Low intensity CBT has its roots within the Improving Access to Psychological Therapy initiative (IAPT), developed in England over the past decade. In the English context, low intensity CBT (LICBT) has been variously described as a "new therapeutic paradigm", "a revolutionary approach", having "transformative" potential, and as an agent for the "democratisation of psychotherapy" (Bennett-Levy, Richards, & Farrand, 2010). Under the LICBT banner have come promises of greater client access to evidence based psychotherapies, more choices, less stigmatisation, and greater client control. A primary aim of such an initiative is to mitigate the shortage and high cost of specialist care without compromising access to mental health services. In fact, the promise has been to increase access and thus the general well-being and productivity of the whole population.

The special section will showcase a number of papers aiming to provide both a conceptual overview and some specific illustrations of LICBT in action, drawing on local and international contributions.

The first paper describes the LICBT approach as developed in England as part of the Improving Access to Psychological Therapies initiative (IAPT, 2008). Here we provide a concrete description of the nuts and bolts of the approach, looking at types of intervention and delivery modes. We then go on to examine one of the central pillars of LICBT, namely the recruitment and training of a new "low intensity" mental health practitioner category called "the Psychological Wellbeing Practitioner" (PWP). The role of the PWP will be contrasted with that of the High Intensity Practitioner which is a practitioner model more in line with what we have come to expect in New Zealand. Paper two, as a companion paper to the first, is an overview of the historical and current status of the New Zealand mental health service delivery model. To provide context, this paper details the ways in which access to,

and delivery of psychological services have been structured, identifying a series of four progressive waves. The paper concludes with a focus on the future. Here we introduce three recommendations which include the training of a new workforce specialising in the delivery of LICBT psychological interventions and an increased utilisation of new ways of delivery which utilise new technologies. The next three papers are empirical research studies completed in New Zealand. The studies describe LICBT programmes delivered to individuals in different contexts. The first examines the applicability of a CBT programme for Asian students studying in NZ, the second looks at 'face to face' and telephone delivery of a LICBT programme, and the third paper has a case study approach examining change during therapy through the application of routine outcome assessments. The last two papers, papers six and seven, are from overseas contributors, who are researchers intimately involved with the IAPT programme in the training, supervision, and management of Psychological Wellbeing Practitioners and in the development of low intensity CBT interventions. Paper six describes a behavioural activation programme for patients with dementia, and the final paper considers self-practice/self-reflection as a novel experiential training strategy in the context of improving therapeutic empathy in Low Intensity practitioners,.

We hope that this series of papers will stimulate discussion in the New Zealand mental health sector regarding the empirically-based research that supports access to services for people experiencing mild to moderate mental health problems.

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Low intensity Psychological interventions in Aotearoa: What can we learn from IAPT?

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Low Intensity psychological interventions are designed to provide cost effective, brief evidence-based psychological interventions to a growing population of individuals who suffer from mild to moderate mental health problems. Low Intensity Cognitive Behavioural Therapy (LICBT) has been proposed as a paradigm shift in the delivery of mental health services aimed at increasing service access and reducing expensive specialist time. In New Zealand primary, secondary, and tertiary mental health services are clearly differentiated and psychological interventions (brief or longer term) are generally delivered by specialist practitioners at each level of service. The paper describes LICBT, developed and delivered in England as part of the National Health Service's integrated, five-tier, stepped care mental health service. This stepped care model will serve to illustrate the paradigm shift in the delivery of mental health services. The successes and challenges of such an initiative are considered.

Keywords: low intensity psychological interventions, stepped care, psychological wellbeing practitioner, self-help

Increasingly, common mental health disorders such as depression and anxiety are recognised as leading causes of disability throughout the world (World Health Organisation, 2016). Poor mental health impacts on an individual's physical health, family life, and workplace functioning. For example, in the UK depression is considered 50% more disabling than angina, asthma, diabetes or arthritis, and accounts for 40% of government benefits paid and 40% of work absenteeism (Clark, 2016). Effective treatments are available but relatively few receive these. It is estimated that less than 10% of the world population are appropriately diagnosed and treated. The reasons for the scarcity of effective treatment are identified as a lack of resources and trained mental health providers, the social stigma attached to mental health problems, inaccurate assessment, and the fact that these conditions appear to be on the rise globally (World Health Organisation, 2016). Mental health services, particularly in the developed world, including New Zealand, are under increasing pressure to substantially improve, or at least manage this situation more effectively. The National Health services in England

have, over the past decade, risen to the challenge by initiating the Improving Access to Psychological Therapies programme (IAPT, 2008).

Low intensity psychological interventions are a key element of this ambitious and wide ranging initiative (Clark, 2011). Two important factors stimulated the growth of low intensity options for mental health problems. These were, the development of the National Institute for Clinical Excellence (NICE) guidelines for the treatment of depression (NICE, 2004a) and the anxiety disorders (NICE, 2004b), and Layard et al.'s (2006) report on the huge economic cost and social burden of the global increase in anxiety and depression. Layard et al.'s (2007) subsequent economic analysis and intensive lobbying regarding the cost benefits of improving access to evidence based psychological interventions resulted in the Improving Access to Psychological Therapies (IAPT) initiative in England. On the basis of the "spend to save" rationale, an investment of 175 million pounds per annum was allocated to the National Health mental health service between 2008 and 2011 to train cognitive behavioural therapists, (identified as a scarce resource), and to

implement a stepped care mental health services model (Clark, 2011). It was posited that the cost of implementing these initiatives would be recovered through a reduction in medical costs and welfare payments, and through increases in revenue gathered from return to employment and improved productivity (Layard et al., 2007).

This paper aims to introduce some of the ideas behind the development of this relatively new therapeutic paradigm to Aotearoa New Zealand mental health community. Low Intensity CBT (LICBT), as practised in England, is defined and described in terms of its mode of delivery, type of intervention, and the primary reliance on CBT as the guiding model for practice. One of the central pillars of LICBT is the introduction of "low intensity" mental health practitioners called "Psychological Wellbeing Practitioners" (PWPs). The PWP role is discussed and contrasted with that of the High Intensity Practitioner (specialist mental health practitioners, such as clinical psychologist or mental health nurse). In addition, a brief overview of the research supporting the introduction of LICBT is provided. The paper concludes by highlighting some of the challenges in delivering LICBT in England.

What is Low Intensity therapy?

The significant gap between the demand for mental health services and the availability of specialist providers to service this need has prompted the search for alternative approaches in the delivery of psychological interventions (Haaga, 2000; Lovell & Richards, 2000). Low intensity (LI) psychological interventions have been developed to bridge this gap and are associated with "low usage of specialist therapist time" (Bennett-Levy, Richards, & Farrand, 2010, p. 4). As such, the main purpose of LI interventions is

to increase access to evidence based psychological interventions for the growing population of individuals suffering from mild to moderate mental health problems, such as depression and the anxiety disorders. This requires a new way of thinking about the delivery of intervention programmes or a "new paradigm" (Bennett-Levy et al., 2010, p.12) that does not increase the burden of funding on taxpayers. Traditional psychological interventions are typically delivered by specialist professional mental health practitioners, referred to as High Intensity (HI) practitioners under IAPT. These practitioners graduate after lengthy years of training and are considered an expensive and scarce resource. They generally see only a limited number of clients presenting with serious or chronic problems. Hence, a cornerstone in the delivery of LI psychological interventions has been the introduction of Psychological Wellbeing Practitioners (PWP) as a new type of practitioner. These practitioners are trained in new modes of service delivery (e.g. through the Internet, SMS, and telephone), and focus on briefer evidence-based psychological interventions. The interventions, often in the form of a manualised treatment protocols, are delivered and supported by PWPs and in some instances, used by the client independently as "self-help" programmes. In England the LI model is situated within a stepped care IAPT service where clients can either be "stepped up" and receive more specialised interventions if they become unwell, or be "stepped down" to primary or community care as they improve. In summary therefore, LICBT, as part of stepped care, consists of a limited number of evidence-based brief psychological interventions, delivered by PWPs using a variety of modes of delivery, such as the internet or self-help workbooks. It is important to highlight that the aim of LI options, within a stepped-care system, is to complement the existing HI approaches and that LI interventions are not designed to replace or prevent access to the specialised skills of highly trained practitioners.

Why Low Intensity Cognitive Behavioural Therapy?

Why has Cognitive Behavioural Therapy (CBT) been selected as the core therapeutic model underpinning LI interventions? CBT has a solid reputation as an evidence-based talking therapy (Westbrook, Kennerley, & Kirk, 2011) and has been shown to be effective across the spectrum of mental health problems from mild to severe. It has been defined as a problem focused, short-term therapy (Beck, 1995), especially when contrasted to psychodynamic models of therapy. CBT interventions are clearly specified and designed to target common difficulties such as negative thinking, low mood, poor motivation, problem solving difficulties, lethargy, and fears and phobias of various kinds. Furthermore, the interventions translate to tangible worksheets, such as activity schedules to enhance behavioural activation, thought diaries to assist with unhelpful thinking, decision making and problem solving tools, and a variety of strategies to encourage monitoring and tracking unhelpful behaviours, thoughts, emotions, and triggers. In addition, over the past three decades disorder specific protocols targeting diagnoses, such as panic and social anxiety, have been developed (Wells, 1997). These protocols are manualised with interventions clearly described. There are also a number of well supported transdiagnostic interventions (Farchione, Fairhome, Ellard, Boisseau, Thompson-Hollands, Carl, Gallagher, & Barlow, 2012) which can be used to target several different diagnostic presentations (McHugh & Barlow, 2012).

The elements of CBT are easily dismantled into simplified components. For example, behavioural activation, identifying thinking errors, and problem solving are used in the treatment of major depression. These multi-components can be disassembled and used separately for the treatment of mild to moderate depression, for example behavioural activation as a complete intervention (e.g. Jacobson et al., 1996). It is this clarity and simplicity that have made CBT compatible with the goals of LI interventions.

It should be noted that CBT was originally developed as an alternative to the established influential psychoanalytic model. Psychodynamic therapy was often conducted over several years, with clients frequently attending daily hourly sessions with a psychoanalyst. In contrast, CBT was delivered over 12-20 hourly sessions by a specialist clinical psychologist or psychiatrist, and was considered, due to its brevity, to be somewhat superficial according to psychoanalytic standards. In the 21st century however, it is now the original CBT protocol developed by Aaron Beck (1976) and elaborated by Judith Beck (1995; 2011a), that is considered to be time consuming, expensive and, within managed care, more useful for those with severe and/or chronic psychological difficulties.

A new kind of practitioner: Enter the Psychological Wellbeing Practitioner

The IAPT initiative has distinguished what have come to be known as High and Low intensity practitioners. HI practitioners are typically those who are graduates of professional training programmes; most often clinical psychologists, specialist nurse practitioners, psychotherapists, and psychiatrists. These practitioners deliver therapy in what has come to be accepted as "the way therapy is done"; for example, individual, weekly sessions, scheduled for one hour with a specialist. Therapy is assumed to be evidence-based, guided by the theoretical orientation of the practitioner, based on an individualised case formulation approach, and tailored to the client's specific needs. The therapeutic relationship is considered an important, if not key, element and is often employed as an intervention to facilitate interpersonal insight and understanding (Persons, 1989; Safran & Segal, 1990).

The rationale behind the introduction of the PWP role was first, to limit HI intervention to more serious and complex presentations thus decreasing expensive and scarce specialists' time and, secondly, to see a larger number of clients than would habitually be treated by the HI practitioner. PWPs are not recruited from graduates of traditional mental health professional training programmes, such as psychologists and

psychotherapists and can come from many walks of life. The preferred PWP workers are individuals who come from diverse groups that reflect the specific socio-cultural mores of the communities they serve. In reality, however, many PWPs do have a background in mental health training and may view the PWP training as a career pathway to becoming a HI practitioner.

PWPs are pivotal to the delivery of LICBT in the IAPT stepped care model, as shown in Table 1. In the five-step care system, the PWP workforce works at Step 2 to support LICBT initiatives for high prevalence mild to moderate mental health problems (Bennett-Levy et al, 2010). At each step, an increasing level

of therapeutic intervention and specialist services are offered. Disorders such as severe depression, anxiety disorders such as PTSD, and other chronic problems such as eating disorders, are earmarked as needing HI interventions and are therefore seen at Step 3 and above.

Typically, PWPs provide clients with 30-40 minute assessment (Farrand & Williams, 2010), followed by some form of intervention and/or support sessions lasting up to 30 minutes (British Psychological Society, 2012). The average number of support sessions is around five sessions. This quicker turn around means PWPs have large caseloads of between 60-100 clients. Clients are regularly reviewed (at least

every 4 weeks) within case management supervision (which will be elaborated on later) and they can be stepped up to receive HI treatment or to secondary care if necessary (NICE, 2011). It should be emphasised that the availability of "higher steps" offering HI interventions are considered vital to the delivery of LICBT, if it is to be successfully embedded in a mental health service (Farrand, personal communication 25 February, 2016).

Psychological Wellbeing Practitioner Training

In England, trainee PWPs attend 25 days of university teaching and 20 days of university-directed study at their workplace where they are expected to take responsibility for their own learning (this is obviously far less than what would be expected for HI practitioners).

The training consists of four modules listed below:

1. Engagement and Assessment of Patients with Common Mental Health Problems

2. Evidence Based Low Intensity Treatment for Common Mental Health Disorders

3. Values, Policy, Culture, and Diversity

4. Working within an Employment, Social, and Healthcare Context.

(Richards and Whyte, 2009, p.8)

Assessment on each of the modules consists of competency-based role-plays, requiring reflective commentary. PWPs also pass a final written examination. PWP training can be difficult for those who have never engaged in formal tertiary education, especially as the training relies heavily on personal responsibility and independent learning in the workplace. The training is often perceived as challenging by PWPs as they are expected to co-ordinate learning experiences alongside facilitating learning opportunities within the clinical setting in which they are employed (Farrand, Rayson, & Lovis, 2016).

Psychological Wellbeing Practitioner Supervision

As with training, clinical supervision has been modified to fit the new PWP role. Labelled clinical case management

Table 1.

The recommended stepped care system for the treatment of depression*

Step	Location	Service	Intervention	Responsive conditions	Possible outcomes
Step 1	Primary care: Physician's clinic	Primary care: Physician or Nurse	Assessment, CBT based psycho-education, monitoring	Mild, self-limiting	Client recovers or is stepped up
Step 2 **	Primary Mental Health Team	LICBT practitioner	LICBT	Mild to moderate high prevalence psychological problems	Client responds or is stepped up
Step 3	Primary Mental Health Team	High Intensity CBT (HICBT) practitioner	HICBT	Moderate to severe	Client responds or is stepped up
Step 4	Mental health specialists including Crisis Assessment Team (CAT)	Multi-disciplinary	Usually incorporates CBT	Treatment resistant, recurrent, atypical or psychotic depression, significant risk	Client responds or is stepped up
Step 5	Inpatient care or CAT			Risk to life, self-neglect	

*(Papworth, 2013, p. 12)

supervision (CMS), this new form of supervision is defined as:

…. regular review of the caseloads of practitioners providing low intensity interventions within IAPT stepped care services. It is undertaken at regular (usually weekly), timetabled intervals and is informed by automated IT-based case management systems. A large number of cases will usually be discussed in any one supervision session. Discussions in case management supervision always include supervisee presentations of patients at pre-determined stages in their care pathway and/or who have particular clinical characteristics.

(Turpin & Wheeler, 2011, p.6)

CMS is designed to support the PWP by ensuring all clients are discussed, maintain fidelity to evidence-based practice, ensure safe practice, and decide whether the client needs to be "stepped up or down". CMS can be challenging due to the volume of clients that are required to be discussed within a relatively short space of time. Ideally CMS is complemented with more traditional skills-based supervision that concentrates on the "development and maintenance of competence" (Turpin & Wheeler, 2011, p.6).

The Therapeutic Relationship and the Psychological Wellbeing Practitioner

Numerous research studies across diverse models of psychotherapy confirm the therapeutic relationship as a key common factor influencing therapeutic outcome (Wampold, 2001), and the way in which the therapeutic relationship is conceptualised is important in distinguishing high and low intensity therapies (Farrand et al, 2016). The relative importance of the therapeutic relationship in LICBT remains a subject of debate. In early cognitive behavioural therapies, the adherence to manualised treatment protocols was prioritised over the therapeutic relationship. However, in recent decades, as CBT has expanded to address increasingly complex client presentations, the importance of the interpersonal process between therapist and client is widely recognised as an important element in the overall formulation of the client's presenting issues in HI CBT (Davidson, 2008;

Safran & Segal, 1990; Young et al., 2003). In contrast, because PWPs deliver short-term psychological interventions to clients who present with mild to moderate mental health problems, manual adherence is emphasised and the therapeutic relationship perceived as "background" rather than an intervention in itself. This means focusing on factors necessary to facilitating productive working relationship (e.g. positive regard, respect, empathy, collaborative stance) (Persons, 1989). In this model the therapist is characterised as an encouraging, facilitative coach.

From a different perspective, Chaddock (2013) argues that because PWPs have a high and heterogeneous client case load, the vehicle of the therapeutic relationship may actually be even more important than in "traditional" CBT. This is due to the fact that PWPs see clients for a relatively short period of time, making the ability to engage the client of considerable importance. However the argument that interpersonal process may be less important in the treatment of mild to moderate mental health problems has been supported by a recent meta-analysis of CBT self-help interventions, which found that there was no statistically significant difference in overall mean effect size whether guided, supported, partially supported, or self-administered intervention was used (Farrand & Woodford, 2013). This tension regarding the relative importance of the PWPs interpersonal skill has implications for those involved in PWP training curriculum development and remains an issue often highlighted by those critical of LI psychological interventions. One of the papers included in this special edition, authored by Thwaites and colleagues, discusses this issue in greater detail.

To conclude, it may be that instead of referencing the "therapeutic relationship", which has connotations conjuring constructs such as transference and counter-transference, "therapeutic engagement" might better describe what an effective PWP is able to achieve.

Self-practice/self-reflection

While therapeutic interpersonal process may have less prominence within a LICBT approach, understanding the process of change and the underlying

principles of the CBT model is an important consideration. Self-practice/self-reflection (SP/SR) is an experiential training initiative which requires practitioners to apply CBT interventions to themselves (SP) and reflect on the process in a structured way (SR). Over the past 15 years, qualitative evidence has accumulated from several countries and across a number of different practitioner populations, including trainees and experienced PWPs (Farrand, Perry & Linsley, 2010; Thwaites et al., 2015), showing SP/SR to be helpful in a number of key areas of therapist professional and personal development. This includes enhanced application and understanding the CBT model and the process of change, most particularly in the interpersonal domain (Bennett-Levy et al., 2015, Gale & Schroder, 2014). There are currently initiatives afoot in England to introduce SP/SR into both the training and support of PWPs (Farrand et al., 2010; Thwaites et al., 2015). SP/SR, delivered in workbook format, in many ways mirrors the manualised treatment protocols used in LICBT, and it could be speculated that it might have an important role to play in the training of these practitioners.

Low Intensity CBT in Action

The initial contact

Typically, a client's presenting problem will be operationalised using a situational formulation model such as the five-area assessment (Dummett & Williams, 2008). The client is encouraged to reflect on the way in which the five areas, namely people and events (triggers), altered thinking, feeling or emotions, physiological sensations, and behaviour interact to maintain and worsen the problem. Once identified and collaboratively understood, the problem is targeted with a specific intervention(s) presented in a manualised format. For example, if poor sleep is identified as a problem a workbook or internet programme is introduced to help the client learn about sleep and sleeplessness through psycho-education, identifying common causes of sleep problems, and using a sleep diary to monitor sleep patterns and recognise what makes things better or worse. Using this knowledge, the client can institute changes in a structured supported way with a PWP

(Dummett & Williams, 2008 p. 249-264).

Additionally, IAPT (2008) places a strong emphasis on measuring treatment outcomes and a number of simple core outcome measures, such as the Patient Health Questionnaire-9 (PHQ-9: Kroenke, Spitzer, & Williams, 2001) and Generalised Anxiety Disorder-7 (GAD-7: Spititzer, Kroenke, Williams, & Lowe, 2006) are routinely used to track progress. The management of risk is also an important consideration in the initial assessment and formulation.

Self-help materials

A cornerstone of LICBT is the use of self-help materials in a variety of formats. Self-help books have a long history and in more traditional high intensity therapy they are generally seen as something to be used *alongside* high intensity therapy. In LICBT the self-help materials take centre stage as it is within the materials that the curative elements are assumed to reside. In this model the PWP takes a secondary role as facilitator or coach who supports, encourages, and helps the client to get the most out of the self-help tools (Williams, Farrand & Bennett-Levy, 2010) and in some instances self-help materials may be utilised in an unsupported or self-administered context.

What is the evidence for LICBT?

The IAPT service has a strong commitment to regular evaluation, and shortly after the UK Government launched the IAPT initiative two demonstration sites, Doncaster and Newham, were selected in 2006 as the pilot and evaluation of the stepped care approach (Clark, 2011).

Significant funding was given towards the training of a new workforce to implement the LI and stepped care model. One year into the trial, over 3500 people were seen across the two sites, with 90% of the referrals coming from general practitioners. Most people seen were of employable age, as return to work was an important aspect of the treatment outcome. The initial evaluations confirmed the successful outcome of LI initiatives. Over 50% of people who completed treatment were reported as fully recovered from depression and anxiety disorders on the outcome measures; a recovery rate comparable to randomised control trial studies. Furthermore, approximately 5% were back into employment; a number predicted in Layard et al. (2007) report. However, compliance with the NICE guidelines to use a stepped care model was modest, and there was limited follow-up to assess the maintenance of gains after treatment.

After the success of the two demonstration sites, the IAPT model was expanded to 11 primary care trusts (PCT) throughout England; named Pathfinder pilot sites (IAPT, 2008). The LI interventions were offered to a wider and more diverse population, such as older adults, children and adolescence, offender, ethnic minority groups, young mothers, and people with long standing health problems. Self-referrals were accepted as a referral source in order to increase equity of access to the services, as well as it was found that fewer sessions were required for this group to achieve recovery (Clark, 2016). The findings mirror that of the demonstration sites in that nearly 50% people reached subclinical thresholds after treatment. The study also emphasised the importance of following the NICE guidelines, as outcomes were poorer when treatment for specific disorders deviated from the recommended treatment (Clark, 2011). One of the main conclusions from the study was that access to the full range of high and low intensity interventions was critical to improvement in recovery rates in treatment.

Challenges and Future Directions

Evaluation of IAPT is, of course, ongoing and as discussed below there has been some critical debate regarding the research questions asked, implementation of the IAPT project and the parameters of success chosen (Cooper, 2012). This paper has presented what could be perceived as a somewhat idealised account of the introduction of LICBT as part of the IAPT stepped care service. There have been significant challenges facing the transformation of mental health services, along with a number of criticisms and concerns levelled at the IAPT initiative as a whole and LICBT in particular. It is beyond the scope of this paper to unpack and respond to the critical discourse in detail and the reader is encouraged to critically consider the main themes summarised below.

Critics have characterised the IAPT initiative as "industrialised talking therapy" which objectifies both client and process of therapy by promoting routinized, manualised, one size fits all therapy (Chapman, 2012, p. 34). The emphasis on RCTs as the gold standard underpinning evidence-based therapy is critiqued as promoting Positivist or Post-Positivist ideology at the expense of other theories of knowledge, particularly those which eschew quantifiable data (e.g. symptoms and behaviours). There is a view that what is characterised as an "audit culture" stifles the subjective creativity of the clinician, so that the "art" of psychotherapy is entirely lost to the science! There are further concerns regarding CBT. Some believe that the CBT model is privileged as the dominant therapy as it fits the empiricist mode by targeting measurable symptoms, behaviours and outcomes. It is suggested that little is known about the long term benefits of other therapies and that social risk factors such as poverty, poor relationships, and lack of housing are not addressed by psychological therapies (Cooper, 2012). There are also concerns that the increased use of the internet and computerised therapy programmes conjure a "nightmare of a truly digitised therapy" (Chapman, 2012, 42). Therapists from other modalities, particularly counsellors and psychotherapists have reported feeling excluded (Lewis, 2012; Risq, 2012) and there is discomfit with the competency frameworks which, once more, are perceived as straightjacketing clinical practice. Finally, there are those who take a broader socio-political stance arguing the emphasis on making the individual responsible for taking steps to ameliorate mental health difficulties obscures contextual problems such as poverty, cultural alienation, etc. (Cooper, 2012).

All of these criticisms, although seeming to represents only a relatively small sector of practitioners (Chapman, 2012), deserve attention, particularly those which concern the wider socio-political context.

Turning more specifically to LICBT, Telford and Wilson (2010), both of whom are PWPs, identify challenges from what they described as the "shop floor" of LICBT delivery. These challenges are:

•   Negative reactions from other mental health professionals to the idea

of LI interventions

• Concerns expressed by HI practitioners regarding PWPs' assessment capability

• Case management as a supervision model supervision model

• What has been termed "therapeutic drift"

These challenges are discussed below.

Negative reactions from other mental health professionals are listed above. Practitioners adherent to psychodynamic and humanist existential psychotherapies have reported perceived marginalisation whereby CBT practitioners are seen as "privileged" as described the following quote: "The CBT minority was seemingly overnight upgraded from bedsit to mansion" (Lewis, 2012, p25). Other concerns centre on the following beliefs: the CBT model is being oversimplified and dumbed down, comprehensive assessment and individualised formulation are being sacrificed to rote-like cookbook delivery of treatment protocols, and the perception that PWPs have not "served their time" in undergoing an extensive academic and professional education. It is suggested that some of these criticisms may arise due to fears that the PWP's role will replace that of HI practitioners and that PWPs will increasingly get to work with severe and chronic mental health conditions, thus squeezing specialist practitioners out of the workforce. Telford and Wilson (2010) suggest that many of the concerns result from poor communication and education regarding the LI paradigm and principles, and recommend that practitioners wedded to more traditional approaches need to be proactively engaged in ongoing dialogue and education. For example, the training of PWPs emphasises the importance of assessment and that the high volume of clients seen by PWPs means that as a group they have accumulated considerable experience in this area. Under the CMS model all the clinical work done by PWPs is closely scrutinised. Concerns regarding assessment could be allayed by services working collaboratively to develop standardised assessment protocols. Critics should be reminded also that LI interventions target the population experiencing mild to moderate levels of

mental illness, which are currently not seen by HI practitioners. This group of clients would fail to receive any effective treatment at all if they were not being seen by PWPs. This client population may benefit from LI type interventions, such as guided self-help, that emphasises a move away from the expertise of the practitioner to that contained within the contents of the material, and which the PWPs are trained to deliver.

The challenge in instituting CMS has also been identified as a problem, with supervisors concerned that the volume of clients to be reviewed is unrealistic. Telford and Wilson (2010) recommend that more targeted training to support supervisors' transition to this new role is necessary.

Another more serious challenge identified has been named "therapeutic drift", which is the tendency for PWPs to migrate towards less evidence-based interventions and/or to treating problems using HI interventions for which they have not been trained. For example, eliciting and working on entrenched schema and core beliefs. This problem is not limited to IAPT services. The dissemination and implementation of evidence-based psychological interventions in clinical services in other health services in developed countries is reported to be uneven at best (McHugh & Barlow, 2012). A variety of reasons for the "research-practice gap" are suggested. This a complex field and three broad areas of challenge are identified namely: the motivation of providers, training barriers and organisational systems barriers (see McHugh & Barlow, 2012 for more detailed analysis).

In a seminal paper, Shafran and colleagues (2009) highlight the gap between the optimal delivery of empirically supported treatments, such as CBT, and the competency and adherence to evidence-based treatment by therapists. They identify three common "therapist beliefs" that have contributed to therapist drift. These are:

1. Research trials have limited relevance to clinical experience: "Research trials recruit clients with straight forward diagnosis that do not mirror the complexity of real life clinical practice".

2. Clinical outcome depends solely on therapist factors: "It doesn't

matter what you do as long as you have a "good relationship with the client".

3. Diagnosis and protocol adherence oversimplify the problem and ignore idiosyncratic presentations: "Protocols are just cookbooks".

Each of these beliefs can be challenged by attending to the research, which in a nutshell states that firstly, clinical trials actually recruit participants from the more severe end of the diagnostic continuum and are more attentive to the participants showing a greater severity of symptoms presented. Participants with milder or fewer symptoms are likely to be excluded from RCTs. Secondly, the more closely evidence-based protocols are adhered to, the more likely it is that the outcome will be favourable (Whittington & Grey, 2014). CBT protocols are designed to be used with an individualised formulation (Beck, 2011b). Therapist factors are important but more often it is those therapists who practise in an adherent and theoretically consistent manner that achieve a solid therapeutic alliance and more consistently positive outcomes. Whittington and Grey (2014) report that unfortunately even those who deliver training programmes in CBT may ignore this research and be guided by similar unsupported beliefs, leading to "therapeutic drift" from the top down.

There are also challenges involved in training the new workforce. As previously mentioned this involves the PWP managing university and workplace commitments simultaneously. A high level of responsibility for self-directed learning is required and the expectation in some overstretched services often can be that the PWP takes on a full case load from the outset (Farrand et al., 2016). In a recent study exploring the uptake of an experiential professional development opportunity (SP/SR), a lack of time was identified as a major obstacle to participation with 62% of those canvassed identifying this as an obstacle to training. This is illustrated in a participant's comment:

"*I thought my workload was already too high and having to find time outside of work when I was already at maximum mental capacity after getting home from work most days*"

(Haarhoff, Thwaites, & Bennett-Levy, 2015).

Many of these challenges can be addressed by proactively educating the mental health providers. However, some aspects such as therapist adherence and competency are more complex. Shafran and colleagues (2009) provide eight recommendations regarding the improved utilisation of empirically based treatments. The two most relevant for LICBT seem to be firstly, clinicians should have easy access to training in diagnostic and routine outcome measures which they should be encouraged to use regularly (*and react to*) and, secondly, that methods to accurately distinguish which clients will benefit from LI or HI interventions need to be developed.

In spite of these challenges, the IAPT stepped care initiative in England, within which LI psychological interventions are a key component, has transformed the treatment of anxiety and depression in England, and is generally considered a "resounding" success (Clark, 2016, Freeston, 2016). For example, stepped care psychological intervention services are established in every area of England, and there is a marked increase in self-referrals (Clark, 2016). Other markers of success include improved throughputs, shorter wait times, more targeted services, increased training opportunities, and development of the workforce, including training in supervision. In addition, outcome data is obtained in 97% of cases, and most importantly, the public profile of psychological interventions has been raised in a positive way. Finally, there has been an increase in the number of trained CBT therapists and in the delivery of evidence-based psychotherapies (Freeston, 2016). Freeston concludes that the "landscape has fundamentally changed" in the UK, to the extent that other countries, for example Australia, are closely watching and adapting services to mirror changes in England.

What is the future for IAPT?

Two keynote addresses at the 8th World Congress of Cognitive Behavioural Therapies in Melbourne considered this question seriously (Clark, 2016; Freeston, 2016).

Both recognised the "burden" of success. Far more people are seeking and accessing treatment for mental health issues. Freeston noted that the oft depicted stepped care pyramid, has not only increased in size but also changed
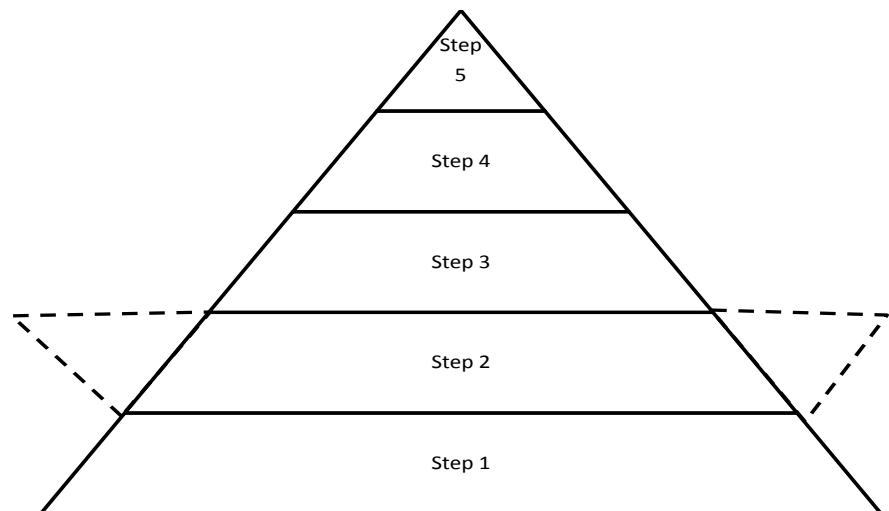
Step1: Recognition, watchful waiting; Step 2: Low Intensity interventions, mild to moderate depression and anxiety & (*something more*); Step 3: High Intensity interventions, moderate to severe; Step 4: Specialist services, severe, treatment resistant, complex, atypical, risk; Step 5: Inpatient, crisis, risk to life.

Figure 1. The changing shape of IAPT stepped care service (Adapted from Freeston, 2016)

its shape (see Figure 1).

There are now more people in the system with presenting issues which appear to have grown in complexity. There are new combinations of symptoms and diagnoses, for example, medically unexplained symptoms, intellectual and learning disability, autism spectrum disorders, and personality disorders. No longer simply, "anxiety and depression" but, "anxiety and depression", and "something more". This has meant that increasing demands are predicted to occur at step two; the LI step. Step two is the first entry after step one, "watchful waiting". This will have implications for PWPs who currently deliver psychological interventions at this step. Freeston asks, "Will this group need more or different supervision and additional competences to cope with increasing complexity?". "Who will provide training and supervision in an already stretched pool of expertise?" Freeston is interested in the potential of targeting core transdiagnostic factors such as low tolerance of uncertainty and avoidance, and developing protocols to target these, thus simplifying delivery (targeting more symptoms with less interventions see Barlow, Allen & Choate, 2004).

Clark (2016), the English National Clinical Advisor to IAPT, is enthusiastic about the power of internet delivery of psychological protocols and interventions and sees the internet use as a mechanism to future proof current services. He proposes several advantages in increasing the use of digital platforms namely:

• More consistent delivery of evidence-based protocols (this also offers an opportunity to use highly skilled specialists in the treatment delivery process)

• Equal access to highly skilled delivery of protocols

• The ability to treat everyone at the same cost as only treating 15%-20% (the status quo)

• An 80% reduction in therapist time

• A reduction in stigma (individuals can access therapy when and where they choose)

• Enhanced outcome evaluation as there will be more consistent delivery of treatment, large samples will be readily available, and new interventions can be rapidly evaluated.

Implications for Aotearoa New Zealand

The situation in New Zealand mirrors the global experience and escalating levels of depression and anxiety disorders, chronic shortages of skilled professionals, particularly GPs and perceived funding shortfalls are consistently reported in the media An aspirational goal for local policy makers is to manage this situation in a way that acknowledges the international consensus for equity of access to psychological services, and endorses the goal to provide psychological support to all that need it.

The current paper is not aimed at proposing an alternative mental health direction in New Zealand. We do however feel that there are lessons to be learned from the successes of IAPT. David Clark (2016) concluded his seminal keynote address with advice for the international audience interested in developing stepped care models along the lines of IAPT. He emphasised the following as key elements:

• The development of evidence-based clinical guidelines such as those delivered by NICE

• The importance of consistent collection of outcome data, to support and build the case for increased funding

• Recruiting support from patients and clinicians

• Delivering on time for the politicians

• The creation of what he called, "an innovation environment" within which recovery- focused clinicians would deliver effective evidence-based psychological interventions.

All of these points seem worthy of consideration if New Zealand is going to move forward with a more inclusive, effective and sustainable mental health service. We would add that training low intensity practitioners in the delivery of evidence-based psychological interventions could be a significant innovation in developing a new arm of the established mental health services In the next paper we describe the current mental health service in New Zealand, the changes that have been occurring with primary mental health service delivery, and consider additional pathways towards a mental health service delivery that can respond to the burgeoning demand for these services.

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Mental Health in Aotearoa New Zealand: Rising to the Challenge of the Fourth Wave?

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Over the past three decades, New Zealand's mental health system has gone through a number of significant transformations. Professor Mason Durie characterises the current stage as the fourth wave of mental health development. Increased understanding of the critical role of good mental health in the well-being and quality of life for the individual, the community, and of society have contributed to these changes. Efforts to destigmatise mental illness have reduced the barriers to seeking mental health services, and people seek care at an earlier stage, preventing deterioration into a spiral of chronicity and negative life situation. Prevention and early intervention are now one of the cornerstones of the mental health system. Yet, for those who have mild to moderate psychological conditions support services remain elusive and evidence-based interventions for high prevalence disorders in New Zealand are meagre. The demand for these services in the current mental health system is growing, yet inequity of access for certain populations is undeniable.

This article will outline the transitions that have occurred since deinstitutionalisation (between the second and fourth waves) in mental health services in New Zealand, providing a background to identifying the challenges inherent in the fourth wave of mental health services. The escalating demand for mental health and wellness throughout the continuum of the lifespan is placing considerable strain on the current model of mental health care, and this paper examines how equipped the mental health service is to meet these challenges. This article, as a companion to the previous paper documenting ways England and Scotland have responded to the social, economic, and personal burden of mental illness, addresses the sustainability of the New Zealand mental health system in the context of a greater emphasis on low intensity psychological interventions across the lifespan.

Key words: mental health; low intensity psychological interventions; high prevalence disorders; Improving Access to Psychological Therapies

The mental health system in New Zealand has undergone major transformation in the past few decades. Although these changes have followed similar events occurring overseas, the manner of the changes and the impact on the health system are unique to New Zealand. Professor Mason Durie (Mental Health Commission, 2012a) characterises the evolution of the mental health system as a number of waves; the first wave lasting more than a century treated people with mental illness in large psychiatric institutions away from the sight of the community, with psychiatry having unquestioned authority. The second wave saw the shift towards deinstitutionalisation and the closure of the large psychiatric hospitals. From being out-of-sight and now sited within the community, the care of the mentally unwell was placed on a society that was largely unprepared and apprehensive. The turmoil that eventuated proved to be a watershed in the evolution of the third wave of mental health services and continues as the existing model we have today.

The emerging literature is now shifting away from the traditional paradigm of mental disorders to one of wellness that is maintained throughout the lifespan. The Mental Health Commission in their Blueprint II (2012b, p. 10) viewed this progression as a "new wave", or as the fourth wave. Durie (Mental Health Commission, 2012a, p. 7) succinctly defined this fourth wave as:

> *"In contrast [to the previous stages] the fourth stage may not be about disorders at all but about dysfunctional relationships, maladaptive attitudes and behaviours, exaggerated responses to life crises, emotional and cognitive symptoms associated with poor physical health, and a failure to adapt to changing times and circumstances".*

The currents of change in mental health care

Second wave (1960s-1980s): Transition from deinstitutionalisation to community care

Internationally, the late 1950s saw rapid changes towards deinstitutionalisation from large psychiatric hospitals into the care of the community for people suffering mental illness (O'Brien & Kydd, 2013). It was not until 1969 that New Zealand legally ratified the move towards a community-based mental health system of care. There was an increasing awareness of the negative impact of involuntary hospitalisation and the loss of liberty faced by those committed to psychiatric care. Furthermore, the fiscal sustainability of long-term institutional care was threatened, particularly after the prohibition of peonage (Brunton, 2013).

However, discharged patients were frequently readmitted back into psychiatric hospitals after a brief period in the community (Mason, Ryan, & Bennett, 1988). As Brunton (2003) astutely noted, deinstitutionalisation was largely concerned with the "de-hospitalisation" of patients from psychiatric institutions, while "deinstitutionalisation", in the form of the long-term effects of institutionalisation, received little attention.

The tragic failures of deinstitutionalisation highlighted in the Mason reports (Mason et al., 1988; Mason, Johnson, & Crowe, 1996) prompted the New Zealand government to develop a strategy for a community-based mental health service (Ministry of Health, 1994). It was also the beginning of an investment by the New Zealand government to ring-fence funding from the general health funds towards the mental health system.

Based on the Tolkein report (Andrews, 1991), the focus of the community mental health initiative was to treat the most severely unwell people, identified as 3% of the total population. Contrasting with the dominant psychiatric institutionalised model of care, its intent was to shift away from an illness model to that of a recovery model; defined as "when people can live well in the presence or absence of their mental illness" (Mental Health Commission, 1998, p. 1). New Zealand was the first country to articulate the principles of a recovery model of mental health care that was eventually taken up by other countries, such as England, Scotland, and the United States of America (NGOiT, 2012). Patients were placed at the forefront of mental health service delivery, and respect for their rights and dignity as service users was paramount. The right to participate in society and not to be discriminated against because of mental illness was also emphasised. The responsibility for recovery would devolve from the State to the consumer, the family, and the community (Ministry of Health, 1994). These aspirational intentions paved the way for the third wave of mental health reforms.

Third wave (mid-90s to early 2000): Development of community mental health services

The focus on community care led to the establishment of a number of community non-government organisations (NGOs; Peters, 2010). The NGOs' initially focused on providing housing and support for the patients leaving institutionalised care, but has now expanded into medical, education and employment training, provision of psychotherapy, and social and cultural support. Despite an increase in community based mental health

providers, it did not necessarily lead to improved quality of care or in quality services due to the lack of integration of services (Ministry of Health, 1997). This prompted the development of a second strategy addressing these difficulties (Ministry of Health, 1997).

The focus of the second strategy was not just to treat mental illness, but to promote good mental health and prevent mental illness. The new mental health model would continue to treat the 3% severely unwell but after Oakley-Browne, Joyce, Wells, Bushnell, and Hornblow's (1989) survey of Christchurch citizens, it would extend its services to treat the 5% with moderate to severe, and 12% of the people experiencing mild to moderate mental health disorders.

People with moderate to severe mental health disorders would be managed through the primary health care services in liaison with the specialist mental health service. Those with moderate to mild problems would be managed through informal support, counselling, and social support services. Materials on the promotion of good mental health would be available to the remaining population. This "building block" model of mental health care is very much the current mental health system operating in New Zealand; with primary, secondary, and tertiary level of care (Ministry of Health, 1997, p. 13).

Central funding for mental health services, however, was primarily targeted towards the development of specialist services at the tertiary mental health sector, and the development of kaupapa Māori and consumer/carer support services at the secondary level of care. There was little investment from central funding to support mental health care at the primary health level. (Dowell et al., 2009).

A number of factors contributed to the prominence placed on the primary health services in mental health care (these services include general practices, nursing services, mental health private practitioners, counselling services, and other support groups). These factors included: the high level of undiagnosed mental health disorders experienced in the community, that general practitioners were often the first point of contact for many people experiencing mental health difficulties rather than the mental health

sector, the findings that mental health problems contributed significantly to the overall burden of chronic health conditions, and the high rate of suicide and distress experienced by young people in New Zealand. These are discussed in more detail below.

Firstly, although the international literature had already highlighted the high levels of mental health problems, with nearly a third of the population experiencing a mental health condition at least once in their lifetime (Steel et al., 2014), research into the epidemiology of mental health disorders in a New Zealand population was limited. Although an earlier study of the prevalence rate in Christchurch found the lifetime prevalence to be high (Oakley-Browne et al., 1989), with anxiety and depression being the most prevalent (Oakley Browne, 1995), it was not until 2003-2004 that a national mental health survey of New Zealanders was undertaken (Oakley Browne, Wells, & Scott, 2006). The report confirmed the high prevalence of diagnosable disorders in the community, with 39.5% reported having experienced at least one episode of mental illness in their life and 20.7% reporting having done so in the past 12 months. The report also highlighted that mental health conditions were disproportionately distributed within the community, with higher rates found for Māori and Pasifika populations, that women experienced higher levels of mental illness, and the younger age group had higher rates for most disorders, particularly substance and major depressive disorder. The prevalence rate for serious, moderate, and mild disorders were 4.7%, 9.4% and 6.6% respectively. Nearly two out of five people with a serious mental health disorder did not seek help, and only a small percentage of those in the moderate to mild group visited a mental health service (35% and 18.5% respectively). The report highlighted the commonality of mental health disorders in the community, the disproportionate rate of mental illness within certain sectors of the population, and that very few people suffering mental distress sought help from the mental health services.

Secondly, although the mental health specialist sector was principally funded for the management and treatment of the

3% most chronic and serious disorders, only 1.6% of those seriously unwell were seen (Mental Health Commission, 1998). This meant that for most people the first point of contact was primarily through their general practitioner. Primary health care services generally act as gateways and gatekeepers to mental health services in the health system; whether to secondary or tertiary level of care. About half of the patients were identified by their general practitioners as having some form of mental health condition, although most were subclinical (Bushnell et al., 2003). The consultations were primarily for physical rather than psychological reasons, yet nearly three quarters of treatment for mental health problems were being provided in the primary health sector (Bushnell & MaGPIe Research Group, 2004); despite most GPs not receiving sufficient training to assess and treat mental health problems. These studies revealed the greatest need for mental health care was at the primary sector, and the inequity in the distribution of funding for mental health services.

Thirdly, 70% of the cases in general practitioners' offices are for chronic diseases, such as diabetes, cardio-vascular disease, and asthma (Veale, 2003), but significant depressive and anxiety symptoms were associated with the disease as well (Chapman, Perry, & Strine, 2005). Cassano and Fava (2002) showed that the comorbidity of depressive symptoms with chronic health conditions increased the morbidity, disability, and mortality for patients compared to their non-depressed peers. Without the recognition and treatment for the psychopathology, patients were less likely to respond to and/or adhere to the recommended care regime, showed greater severity and chronicity in their health condition, and experienced lower quality of life and general functioning. Thus there was increasing recognition that poor psychological health added to the overall burden of long term chronic health diseases, over and above that of the illness itself (Moussavi et al., 2007).

Finally, of the rates of suicide in any Organisation for Economic Co-operation and Development (OECD) countries, New Zealand was one of the highest particularly amongst young people (Ministry of Health, 2007a). Apart from motor vehicle accidents,

suicide was the leading cause of death per year. Hospitalisation from suicidal harm, however, is ten times greater than the fatality from suicidal attempts. Beautrais' (2006) study found that while suicidal ideations were common, the risk of suicide behaviours was unequally distributed in certain populations groups, with the highest risk in the most deprived areas, for young people, and for ethnicity, Māori (both male and female). Despite the morbidity and mortality from suicide, nearly half of the people did not see a specialist mental health professional and less than one-third who made a suicide attempt received treatment.

The high prevalence of mental health concerns in the community, that most people did not seek care from the mental health system, and the inextricable link between health and mental health highlighted the importance of the primary health care sector. The development of the Primary Health Care Strategy (Ministry of Health, 2001) led to the emergence of the Primary Health Organisations (PHOs) in the third wave of mental health care. The new entity was seen as the vehicle through which primary mental health care would be delivered, particularly to the 17% of people experiencing mild to moderate mental health problems (Rodenburg & Dowell, 2008), and reduce the inequities of access for high need groups. Only a few PHOs were initially funded to carry out this activity (Collings et al., 2010) but once central funding was extended through the Primary Mental Health Initiatives (PMHI) in 2004, it opened the gateway for the PHOs to develop a number of innovative mental health practices (Dowell et al., 2009). A variety of models were developed, dependent on the resources allocated and the local need (Dowell et al., 2009). For example, iwi based and Pasifika organisations developed culturally appropriate services for their local community. For some, new mental health professional positions were created or there was redesignation of roles within the existing personnel in the PHOs, or the service was contracted out (see Dath, Dong, Stewart, & Sables, 2014; Fitzgerald, Galyer, & Ryan, 2009; Lyons & Low, 2009; Wynands & Gawith, 2009 for an outline of some of the mental health initiatives in the primary health sector).

Since then, awareness of mental health issues has increased through a number of government-led mental health campaigns that helped to reduce the stigma and discrimination of people with mental illness (i.e. Like Minds Like Mine, Ministry of Health, 2007b). Support for on-line therapy for depression/anxiety (for adults: "the Journal" fronted by Sir John Kirwan; "Beating the Blues" which require general practitioner referral; for young people SPARX; Merry et al., 2012) were also provided. The technology explosion opened up avenues of access to a number of self-help online resources and support (e.g. Common Ground, thelowdown), and more recently internet applications that offer a range of services from daily monitoring and measurement of symptoms and mental wellbeing (see Mental Health Foundation, 2017 for a list of these).

Fourth wave: Moving into the future?

Deinstitutionalisation has wrought substantial transformations in mental health care. The landscape around mental illness is rapidly shifting and changing, and the influx of new technology will escalate this trend. Since 2008, the demand for mental health services has increased nearly 60 per cent, with the biggest growing demand from those with mild to moderate mental health needs (Coleman, 2017). The biggest challenge facing the sector is the lack of a mental health workforce to service this need (Mental Health and Addiction Service Review Working Group, n.d.), and the lack of a new way of thinking around the delivery of services that would address these needs. Even at the mild to moderate levels of distress, the impact on functioning in the personal and occupational domain, and the cost to society of homelessness, poverty, crime, and unemployment when people are disabled are immense (Layard, Clark, Knapp, & Mayraz, 2007).

The first paper in this series (Haarhoff & Williams, 2017), documented fundamental changes introduced in England as part of the IAPT initiative between 2006 and the present time. The current paper has provided a context to consider the future of the New Zealand mental health service. Are there steps which can be taken to ensure a sustainable inclusive mental health service? Where

will the fourth wave take us?

The fourth wave: What are the challenges?

Before outlining a number of key recommendations regarding the question above, we summarise key differences between the English and New Zealand mental health systems.

Firstly, the IAPT service operates within an all-encompassing five tier stepped-care system which offers integrated care wherein patients can be "stepped up or down" according to need. In New Zealand there is no wrap-around stepped-care service available. The District Health Boards (DHBs) oversee tertiary services (e.g. inpatient, crisis team, early intervention and psychiatric liaison services) and secondary services (community mental health, adult, child and adolescent). Primary Health care (although funded by the DHBs) sits outside of the DHBs and consists of private practitioners (clinical psychologists, psychotherapists, counsellors etc.), General Practitioners, PHOs, and various NGOs. All but the most serious presentations are seen outside of the DHBs. The result is that many patients with complex and chronic diagnoses and problems are managed in the overpopulated primary health sector, and those with mild to moderate disorders, who cannot afford private mental health care, have to compete with those who have more severe problems, often falling by the wayside, or receiving less effective treatment.

Secondly, IAPT distinguishes High and Low Intensity practitioners in terms of competency based training which is then matched to the level of complexity of the patient. Patients with more complex and chronic difficulties are treated by High Intensity practitioners. Those with mild to moderate presentations are allocated to Low Intensity practitioners, such as the Psychological Wellbeing Practitioners (PWP: see Haarhoff & Williams, 2017). In New Zealand the workforce is professionally differentiated. However, in terms of the type of treatment delivered, specialist practitioners in the secondary sector deliver what could be characterised as brief (low intensity) and more elaborated psychological interventions (high intensity). There is no

practitioner profile similar to the PWP in New Zealand.

Thirdly, the IAPT service follows NICE guidelines (National Institute for Clinical Excellence, 2004). These guidelines specify the most appropriate evidence-based psychological interventions for specific diagnostic presentations. For most diagnostic presentations, CBT interventions are the primary recommendation. Outcomes are also measured using a consistent set of measures. In New Zealand there is no unified set of clinical guidelines specifying what psychological intervention should be delivered to which patient, and there is no standardised routine collection and evaluation of outcome related data. Practitioners use a variety of psychological interventions which may or may not be evidence based.

Fourthly, in New Zealand specialist training is professionally based, for example nursing, social work, clinical psychology and social work. In contrast, IAPT services support competency based training (for example the adherent delivery of particular treatment protocols), Within this system clinical psychologists and mental health nurses can both be trained to deliver High Intensity psychological interventions and psychologists sometimes work as Low Intensity therapists. In New Zealand, once professional training is complete ongoing professional development is generally left up to the individual practitioner, The IAPT service however, actively encourages and supports ongoing competency-based professional development.

Finally, and most importantly and uniquely, New Zealand is a bi-cultural country and psychological interventions have to reflect and adequately accommodate Māori perspectives. The cultural and bi-cultural status quo has wide ramifications for the sustainable development of mental health services.

Recommendations

From our perspective, three recommendations emerge from the points of differentiation outlined above:

1. The reduction of scarce and expensive specialised time at the primary level of mental health service delivery.

We suggest this could be achieved by augmenting the mental health workforce by introducing a new kind of mental health service practitioner trained to competently deliver evidence-based low intensity CBT psychological interventions.

2. Employ standardised evidence-based psychological interventions shown to be effective in primary mental health service delivery. This would mean a greater emphasis on models of intervention with a proven evidence-based track record such as CBT.

3. A greater emphasis on utilising alternative methods for the delivery of psychological interventions, for example workbooks and the internet. These alternative modes of delivery can be utilised by the patient in both a supported and unsupported context.

Each of these recommendations is elaborated below.

Reducing specialist intervention at the primary level

General practitioners (GPs) who shoulder the bulk of responsibility for referring patients with mental health difficulties to appropriate services (e.g. PHOs, NGOs and private practitioners) also receive some funding to support the delivery of psychological interventions as part of general practice. There are several problems inherent in this system. First, GPs are the most expensive of the professionalised services available. Secondly, the funding the GPs receive from the government is variable and depends on the area of practice as determined by generalised socioeconomic and demographic information. This means that some individuals are compromised by their area of residence. Thirdly, GPs are widely accepted to be a scarce resource, and lastly they have very little training in the delivery of specific and targeted psychological interventions for people with mild to moderate mental health needs. Developing a non-specialist workforce similar to that of the PWP would be a pragmatic solution to some of the problems enumerated (see Haarhoff & Williams, 2017 in this special section). Of particular relevance regarding the introduction of a new kind of practitioner is that New Zealand is becoming increasingly multi-cultural. Auckland is ranked fourth in the world in terms of

cultural diversity (ahead of New York and London) with 39% of the population born overseas (Peacock, 2016). Migrants arriving from South East Asia, China, and the Pacific Islands have traditions, practices, religious, and spiritual beliefs very different from those espoused by mainstream New Zealand culture, and this will influence the way in which the different cultural groups will interact with mental health services. A new type of practitioner more reflective of these diverse cultures is urgently needed. It could be speculated that accelerated training opportunities for practitioners that reflect this diversity is becoming a priority.

Increased utilisation of standardised evidence-based treatment protocols

In New Zealand the "brief therapy" or "time sensitive" model of psychological intervention is the model of choice, supported by the primary workforce development agency, Te Pou (2016). The brief therapy model was conceived in the context of managed care in North America, and was presented as emancipating the therapist and client from the strait-jacket of 'established therapy practice' (Bor, Gill, Millar, & Parrott, 2004). A parsimonious definition of "brief therapy" is difficult to find and the model is characterised as "any therapy in which the time allotted to therapy is rationed" (Bor et al., 2004, p. 15). Brief therapy is reliant on the therapist's ability to be creative, collaborative, active, and flexible in accessing the client's strengths, resilience and personal resources within a very limited period of time. The client's coping resources are then channelled towards a solution to the client's most pressing problem. Much emphasis is placed on the therapist's skill and experience to engage the client and mobilise change rapidly. The delivery of brief therapy rests on skilful use of the "miracle" question. While we have no dispute with this approach, however, it would appear that much depends on the skill of the practitioner, and in fact it is recommended that a high level of skill is necessary for success using this mode of therapy. Finally, tangible outcomes and mechanisms for change are difficult to quantify using this model.

Te Pou (2016) has taken the lead in providing recommendations in their "Let's get talking" document on what may be suitable for working with people with low-moderate mental health conditions. It provides a list of brief interventions for primary care as follows: giving people feedback and raising awareness, building positive options to enhance resilience and wellbeing, assessment of motivation and readiness for change, problem solving and goal setting, advice about addressing lifestyle issues, CBT based self-help resources, behavioural activation techniques, symptom monitoring, and short courses of talking therapy. These recommendations, however, conclude that the evidence for the effectiveness of these interventions are yet to emerge, although there is some evidence for alcohol dependence. No published research has been conducted thus far, and so to some extent the "evidence" may simply rest on the anecdotal accounts of practitioners. The problems we further identify are that the interventions listed are numerous, and there is no indication of priority or matching of specific intervention in terms of the client's diagnosis or presenting issue. We recommend that attention should be given to evidence-based psychological interventions (of which CBT is one). Further, it is very often the case that "less" done well is far more useful than "more", when it is executed poorly.

Utilising alternative methods and modes for the delivery of psychological interventions for mild to moderate mental health conditions.

One of the cornerstones of the Low Intensity Cognitive Behavioural Therapy (LICBT) arm of the IAPT service is the utilisation of simplified manualised treatment protocols. These protocols are evidence-based and designed to be accessible and easy to understand. Some examples are Living Life to the Full (Williams, 2007) and the Five Areas approach (Williams, & Chellingsworth, 2010) (see Lee & Williams 2017, and Montagu & Williams, 2017 articles in this Special Section). These manualised programmes contain targeted psychological interventions, and the role of the PWP is to maximise the impact of these materials by offering support in their use. There is also increasing evidence showing that many of these programmes can also be almost as effective when used independently by the patient (Andersson & Cuijpers, 2009; Berger, Hämmerli, Guber, Anderson, & Caspar , 2011). As previously mentioned these interventions can also be delivered in a variety of digitally supported contexts.

Conclusions

New Zealand is not unique in trying to find sustainable solutions to maintaining and improving the mental health of its citizens. The biggest challenge to the sustainability of the mental health system in New Zealand are services that can deliver treatment for the high prevalence disorders (defined as mild to moderate disorders and medically unexplained conditions; Ministry of Health, 2012), particularly at the early intervention primary level of care. With a growing and ageing population, and the success of de-stigmatisation programmes reducing the barriers to help-seeking, the demand for mental health services will increase (Mental Health Commission, 2012a). As discussed there is a shortage of a trained workforce that not only represents the cultural diversity of New Zealand but can meet the growing demand for mental health services if the objective of well-being across the lifespan is to be achieved (Mental Health and Addiction Service Review Working Group, n.d.). Furthermore, there is a fundamental lack of research of interventions that are evidence based for mild to moderate mental health conditions in New Zealand (Ministry of Health, 2017).

As psychological practitioners we can contribute our knowledge and expertise to this rising challenge; in having a mental health system that permits equity of access for all people at all stages of their life, and not one that caters just for the severely unwell or the privileged. This will mean developing evidence based interventions that are culturally appropriate for the high prevalence disorders, and to consider new methods of delivery and practice that can service this need. There are experiences we can learn from overseas to support a mental health system that is sustainable for the current and future generations; one that can take mental health into a future of recovery, well-being, and resilience.

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The effectiveness and cultural compatibility of a guided self-help cognitive-behaviour programme for Asian students in New Zealand

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Asian international students studying in New Zealand experience unique challenges and problems associated not only to adjusting to a new culture but to a new education system as well. With a number of Asian international students now studying in New Zealand, there is a lack of psychological interventions that are both effective and culturally compatible for this group. Cognitive Behaviour Therapy (CBT) has been shown to be effective in the treatment of depression and anxiety for an adult Asian population, but the results were mainly from studies conducted in the United States.

The purpose of the study is to fill the gap by examining the effectiveness and cultural compatibility of a guided self-help, low intensity cognitive behavioural programme for international students of Asian descent in New Zealand; Living Life to the Full (LLTTF; Williams, 2007). Using a repeated measures time-series design, the participants were 11 East Asian and Southeast Asian students recruited from universities and language school in Auckland. Quantitative measures were administered throughout the 8 weeks of the programme, and feedback about the compatibility of the programme for Asian students was obtained at the end of the programme. Results supported the effectiveness of the programme in the reduction of depression and anxiety symptoms, and the improvement of quality of life and adjustment to tertiary study. In addition, participants found the low intensity style of intervention helped remove the barriers of stigma and reluctance to seek help. It also provided a more accessible form of psychological interventions that was deemed to be culturally compatible with the Asian student population. Overall, the findings supported the suitability of the low intensity intervention for Asian students studying in New Zealand.

Keywords: Asian international students; Low intensity cognitive behavioural interventions; guided self-help

New Zealand's international education industry is worth $2.85 billion (Education New Zealand, 2014), and is New Zealand's fifth largest export sector (Ministry of Education, 2014). Legislative changes to the visa requirements for international students in 2013 made it easier and more attractive for young people to study in New Zealand (Joyce & Woodhouse, 2013). Since the changes, there has been nearly a 12% increase in international students becoming involved in the New Zealand higher education sector (Education New Zealand, 2014). International students from East and South East Asia make up a significant proportion of those studying in New Zealand tertiary institutions (Ministry of Education, nd). Of the 48,000 international students enrolled in 2013, students of Chinese descent were the largest group (Ministry of Education, nd).

Asian international students face unique challenges that are similar to those of other Asian migrants, but in addition carry the pressures from their family to succeed academically. With considerable sacrifice to finance studying overseas, the pressure to succeed may manifest in the student experiencing poor physical and psychological health, loneliness, fear of failure, lack of academic success, and interpersonal conflicts (Baker & Siryk, 1986; Bean, 1982; Church, 1982). Coming to a foreign country, navigating the demands of an alien educational system, and sometimes experiencing racial prejudice related to their status as ethnic minorities have the potential to negatively impact on their academic achievements and experience of studying overseas.

Adjustment to studying overseas has been termed "sojourner adjustment" by Brein and David (1971), or "culture shock" first introduced by Oberg (1960). This definition encompasses not only the shock and anxiety related to adjusting to a new culture very different from one's own but includes the psychological wellbeing, academic, and sociocultural outcomes of adapting to the host culture. The level of culture shock is expected to be greater when the student encounters a culture very dissimilar to the culture and language of their own country (Church, 1982).

Russell, Rosenthal, and Thomson (2010) found that 41% of international students studying in Australia experienced substantial levels of stress due to homesickness, culture shock, and/or racial discrimination. Often Asian international students have fewer resources to cope with these stressors (Kaczmarek, Matlock, Merta, Ames, & Ross, 1994). The following section highlights specific struggles that Asian international students may face and these include the expectation for academic success, social adjustment, and help-seeking patterns.

Academic expectations

In Chinese culture generally, the expectation of academic success is ever-present with failure bringing shame and "loss of face" (Chen & Davenport,

2005). The importance of achieving academically is internalised at an early age (Foo, 2007), as academic success is seen as the key to family social mobility (Xie & Goyette, 2003). The pressure is even greater for young people studying overseas because of the sacrifices families make to assist their child to achieve this. Saw, Berenbaum, and Okazaki (2013) found that Asian students reported greater academic achievement and family-related worries than non-Asian students, although no differences were found in the frequency of worries in other areas. The perceptions of living up to parental standards and current academic achievement partially mediated this relationship in the academic worry domain. So for international Asian students the need to succeed may create higher levels of stress and anxiety than for non-Asian students.

Social adjustment

International students leave behind their established support systems and must learn new ways of relating to the education and social systems of their host country. For many Asian students close inter-connected ties to the family unit and an interdependent relationships with their parents are fostered from an early age (Wang & Leichtman, 2000). This is compared to New Zealand where independence is encouraged and leaving home to go flatting is regarded as a rite of passage for many young tertiary students.

Yip (2005) highlighted the struggle of loneliness and the challenge of re-establishing oneself into a new social group and developing a social identity. In trying to establish new social relationships, Asian students tend to form friendships with others who are from the same country (Abe, Talbot, & Geelhoed, 1998). However, Surdam and Collins (1984) found that individuals who interacted only with students of a similar culture were less adjusted than those who formed friendships with domestic students. A study in New Zealand found that international tertiary students were less socially competent compared with domestic students (Brown & Daly, 2005).

In a review conducted by Zhang and Goodson (2011), psychosocial adjustment of international students was predicted by the level of stress, social support, English proficiency,

country of origin, length of time in the host country, acculturation, social interaction with locals, self-efficacy, gender and personality. Baker and Siryk (1989) measured students' adjustment to studying at university using the Student Adaptation to College Questionnaire. Adjustment was measured on four domains: academic, social, emotional-personal, and institutional attachment. As a whole, international students were found to score lower than domestic students on social adjustment (Rienties, Beausaert, Grohnert, Niemantsverdriet, & Kommers, 2012) and institutional attachment (Kaczmarek et al., 1994). Compared with other international students, Asian international students were less academically and socially adjusted (Rienties & Tempelaar, 2013), and less institutionally attached (Abe et al., 1998). This difficulty in adjustment may affect Asian international students' participation in university life and enjoyment of their study experience, which in turn negatively impacts on their mental health and academic achievements.

Help seeking

Despite the difficulties discussed above, international students' generally achieve high academic grades, and coupled with their low usage of counselling services, may give rise to false perceptions that Asians are mentally robust and well-adjusted individuals (Boyer & Sedlacek, 1988; Kaczmarek et al., 1994). However, their lack of presentation in healthcare settings may reflect a reluctance to seek help rather than having better mental health. Accessing help may be due to the stigma of mental health in Asian society (Masuda & Boone, 2011), or a reluctance to reveal to parents or health professionals about their struggles for fear of 'losing face' (Ngai et al., 2001). Surdam and Collins (1984) reported that it was difficult for international students to seek assistance on mental health issues other than those related to practical matters, such as immigration and finances. In a study with Thai students by Seesaengnom, Parackal, and Ho (2012) the cost of the service was cited as a barrier to accessing primary health care services in New Zealand. Some students with a history of mental illness may be reluctant to disclose of

their problems for fear of jeopardising their chance of studying overseas. The delay in seeking help may further exacerbate these problems and lead to poorer mental health outcome.

Low Intensity Cognitive Behaviour Interventions

The purpose of low intensity interventions is to provide people with low to moderate mental health problems to receive a low level of therapist input that is cost effective (Bennett-Levy, Richards, & Farrand, 2010). Psychological interventions are typically offered to those with high need, and those just under the clinical threshold may find it hard to access these services. The concerns about lack of accessibility and affordability of mental health services led to the development of low intensity cognitive behavioural interventions (LICBI) within a stepped-care model in England (Clarke, 2011).

There is evidence to suggest that low intensity alternatives, such as guided self-help, and traditional CBT have comparable effects (Cuijpers, Donker, van Straten, Li, & Andersson, 2010; Jacobson et al., 1996; Lovell, Richards, & Bower, 2003). In addition, there is emerging support for shorter and more focused delivery style of treatment, such as LICBI (Whitfield & Williams, 2003). Findings by Barkham et al. (1996) demonstrated that improvements in CBT treatment plateaued after eight sessions; supporting the utility of brief interventions particularly for people suffering mild to moderate mental health difficulties. As suggested by Jorm et al. (1997), brief interventions may be a preference for particular populations and for particular problems. Such brief interventions for Asian students would be of interest to examine.

Living Life to the Full (LLTTF: Williams, 2007) is a low intensity intervention based on the principles of CBT and teaches life skills in response to the demands of everyday life. It was designed to be cost effective and accessible, providing evidence-based treatment for people experiencing less severe forms of mental health problems, such as depression and anxiety. The programme provides strategies to modify unhelpful thinking, feelings, behaviours, and physical symptoms, and uses

language that can be easily understood by people in the general community setting (Williams & Garland, 2002). LLTTF can be delivered individually or in group format, with or without the support of a para-professional, and can be accessed via the internet or in hardbook format. It uses different media that enhances self-directed learning of the CBT concepts, such as through print and visual aid materials.

Research support for the effectiveness of LLTTF, however, is limited, particularly its suitability for different ethnic groups (except see Lloyd & Abdulrahman, 2011). Hall (2001) noted that even though CBT is an empirically supported therapy for treating a range of mental health disorders, there was a lack of empirical investigations into culturally sensitive interventions. Furthermore, there was an absence of incorporating ethnic minorities into these evaluation studies. Reports have found that Asians are unfamiliar with Western models of care and prefer alternate interventions that incorporate spirituality, balance, and holistic health (Te Pou, 2010). Ethnic minorities may thus avoid seeking help or end treatment prematurely if they perceive a lack of understanding from psychological practitioners (Hall, 2001). At present, LLTTF has only been used and tested in England and Scotland. The current research examined the effectiveness of the LLTTF programme for Asian students studying at tertiary institutions in New Zealand.

Method

Study Design

The study used a repeated measure time-series design to investigate the effectiveness of the guided self-help Living Life to the Full (LLTTF; Williams, 2007) low intensity intervention. In addition, qualitative information was obtained to gather feedback about the cultural compatibility of the programme.

Participants

Thirteen participants volunteered for the study and all were deemed suitable for the programme, with eleven completing the 8 weeks' programme. One participant moved to another city and the other left for employment opportunities. Their

data were not used for the analyses. The participants' age ranged from 20 to 29 years ($M = 23.8$, $SD = 3.2$), with most participants having lived in New Zealand for a number of years ($M = 7.9$, $SD = 8.6$). Most were male (63.6%) and of Chinese descent (63.6%). They came from China (4), Malaysia (2), the Philippines (2), with one each from Taiwan, Vietnam, and Cambodia. In terms of their level of study, just over half (54.6%) were undergraduates and 18.2% were postgraduates studying at a university. The remaining participants ($n = 3$) were either attending language schools or completing an internship as part of their study.

Procedure

Participants were recruited using posters and flyers written in English and Mandarin, distributed around universities and language schools in the Auckland area. Participants were advised the research was a guided self-help programme to teach key life skills to help overcome low mood and other common difficulties, such as sleep, and feeling a lack of control in one's life. Participants who expressed interest in taking part in the research were sent a screening questionnaire, that included the exclusion criteria for the study; such as imminent risk of harm to oneself and/or others, a previous diagnosis of substance abuse, personality disorder or psychosis, or unable to commit to the 8-week

programme. Participants were advised that the programme is a guided self-help programme, rather than therapy-based. Once the participant met the criteria, a meeting was arranged at a convenient location to conduct the initial assessment and introduce the self-help nature of the intervention. A video explaining the Five Part Cognitive Behavioural model was used and the baseline self-report measures were completed at this time. The data from this initial meeting formed the baseline/pre-intervention data, and participants started the LLTTF programme a week later.

The LLTTF programme was conducted weekly over 8 weeks, with session times ranging from 25 to 65 minutes; taking on average 40 minutes to complete. Different venues were used to deliver the programme depending on its convenience to the participant, such as rooms in libraries or universities. Approval for the study was received from the Health and Disability Ethics Committee, reference13/STH/86.

Intervention

The 8-week LLTTF programme (Williams, 2007) uses basic cognitive behaviour therapy principles and techniques that teach life skills to meet the demands of everyday problems. The programme is presented in nine colourful booklets (including the pre-intervention topic) with different topics covered at each session (refer to Table 1).

Table 1
Living Life to the Full 8-week Programme

Week	Title of booklet	Topic covered
Pre-intervention	Write all over your bathroom mirror	A guide to using LLTTF
1	Why do I feel so bad?	Explaining the Five Part Model
2	I can't be bothered doing anything	Increasing pleasurable activities
3	Why does everything always go wrong?	Changing negative thinking
4	I'm not good enough	Increasing confidence and self-esteem
5	How to fix almost everything	Breaking down problems and making plans
6	The things you do that mess you up	Changing unhelpful behaviour
7	Are you strong enough to keep your temper?	Managing anger
8	10 things you can do to make you feel happier straight away	Practical tips to boost mood

Note. Booklets are from Williams (2007) Living Life to the Full programme

LLTTF is designed for group-delivery format, however, it was considered that this would limit its usefulness to Asian students, particularly for a population that is unfamiliar with psychological therapy (Chellingsworth, Williams, McCreath, Tanto, & Thomlinson, 2010). Disclosing personal difficulties in a group format may be perceived as shameful for Asian students (Tucker & Oie, 2007). In consideration of these cultural factors, the programme was delivered on an individual basis as it was speculated that participants would be more open in discussing their difficulties than in a group format. Williams (personal communication, April 5, 2013) agreed that LLTTF would be suitable with individuals, and permission was given to deliver the programme on a one-to-one basis.

Due to the limited timeframe, the anxiety control training session was not used and the group exercises were omitted. The booklets were presented to participants at each session. When required, the facilitator would use Mandarin to explain the concepts. All sessions were conducted by the first author (KL), with supervision from the second author (MW). Each session started with checking the mental state of the participant before starting the programme.

Measures

The measures assessed for symptoms of depression and anxiety, perception of one's quality of life, and adjustment to studying at a tertiary institution. All the measures were self-report instruments, suitable for a non-clinical populations. across.

Patient Health Questionnaire 9 (PHQ-9)

The PHQ-9 (Spitzer, Kroenke, & Williams, 1999) is a 9-item questionnaire that correlates with the diagnostic criteria for depression in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 2000). It is a valid and reliable measure for screening depression (Kocalevent, Hinz, & Brahler, 2013), monitoring treatment progress (Chen, Huang, Chang, & Chung, 2006), and detecting clinical change over time (Lowe, Kroenke, Herzog, & Grafe, 2004;

Titov et al., 2011). PHQ-9 scores range from 0 to 27, with the scores indicative of five levels of severity: minimal (1-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe (20-27). A cut-off score of 10 is considered clinically significant in detecting major depression (Arroll et al., 2010; Spitzer et al., 1999). The PHQ-9 was administered at pre-intervention and then every week of the programme. Cronbach's alpha coefficient was $\alpha = .89$.

Generalised Anxiety Disorder 7 (GAD-7)

The GAD-7 (Spitzer, Kroenke, Williams, & Lowe, 2006) is a 7-item questionnaire reporting anxiety severity over the past two weeks. The reliability and criterion validity for the scale in detecting generalised anxiety disorder is well established (Dear et al., 2011; Kroenke, Spitzer, Williams, & Lowe, 2010; Spitzer et al., 2006). GAD-7 scores range from 0 to 21: minimal (0-4), mild (5-9), moderate (10-14), and severe (15-21). A cut-off score of 10 was recommended for detection of generalised anxiety disorder (Kroenke et al., 2010). The GAD-7 was administered at pre-intervention and every week of the programme. Cronbach's alpha coefficient was $\alpha = .88$.

World Health Organisation Quality of Life Questionnaire (WHOQOL-BREF)

Quality of life is defined by the World Health Organisation as an individual's perception of their place in life in the context of their culture and value systems, and in relation to their aspirations, expectations, standards, and concerns (World Health Organization Quality of Life Group (WHOQOL Group), 1994). The WHOQOL-BREF is a 26-item, shortened version of the WHOQOL-100. It consists of four domains: physical, psychological, social and environment (WHOQOL Group, 1998). Respondents indicate their perception of the quality of their life over the past 2 weeks, with higher scores indicative of a better quality of life. The WHOQOL-BREF shows good psychometric properties of reliability and validity (Skevington, Lotfy, & O'Connell, 2004), and demonstrate good validity for use in cross-cultural settings, having been translated into 30 languages

(WHOQOL Group, 1998). Permission for using the WHOQOL-BREF in this study was obtained from The WHOQOL Group. The WHOQOL-BREF was administered at pre-intervention and subsequently in weeks 4 and 8. The Cronbach's alpha coefficients for the study were moderate for the physical and environment subscales ($\alpha = .59$ and $\alpha = .65$ respectively), and good for the psychological and relationship subscales ($\alpha = .82$ and $\alpha = .83$ respectively).

Student Adaptation to College Questionnaire (SACQ)

The SACQ was developed by Baker and Siryk (1989) to measure students' adjustment to college. It is a 67-item questionnaire, with higher scores indicative of better adjustment. A meta-analysis showed that the scores on the SACQ were a good predictor of students' grades and retention at college (Crede & Niehorster, 2012). Adjustment is considered multifaceted and therefore the measure is divided into four subscales: Academic Adjustment (the extent a student copes with educational demands), Social Adjustment (the extent a student copes with interpersonal demands), Personal-Emotional Adjustment (the extent a student experiences psychological distress and somatic problems), and Institutional Attachment (commitment a student has to their institution; Dahmus, Bernardin, & Bernardin, 1992). The full scale score is generally not interpreted in isolation, but is designed to be interpreted using the four subscales (Baker & Siryk, 1989). The SACQ was administered at pre-intervention and in the final session of the programme. For the study, Cronbach's alpha coefficient was $\alpha = .89$ for the full scale, $\alpha = .88$ for the academic subscale, $\alpha = .72$ for the social subscale, $\alpha = .83$ for the emotional subscale, and $\alpha = .82$ for the attachment subscale.

Cultural compatibility of the programme

A semi-structured interview was conducted at the conclusion of the intervention to get feedback about the usefulness of the programme for Asian students. The interview inquired whether participants thought the programme met their needs, was culturally appropriate, and how the programme could be adapted to fit in with their cultural background.

The feedback was explored using content analysis.

Results

Quantitative analysis

Depressive and anxiety symptoms

Investigation into the effectiveness of the programme was first, to statistical analyse change for the total sample using the aggregated scores and, secondly, to investigate the clinical significance of the change for each participant.

There was a statistically significant decrease in the PHQ-9 scores from baseline ($M = 10.55$, $SD = 5.47$) to week 8 ($M = 3.36$, $SD = 2.77$, $t(10) = 4.68$, $p = .001$ (two-tailed)). The mean decrease in PHQ-9 scores was 7.18 with a 95% confidence interval ranging from 3.76 to 10.61. The eta squared statistic (.69) indicated a large effect size. For the GAD-7, similar results were found with a statistically significant decrease in GAD-7 scores from baseline ($M = 10.45$, $SD = 4.59$) to week 8 ($M = 3.18$, $SD = 2.71$, $t(10) = 6.07$, $p < .0005$ (two-tailed)). The mean decrease in GAD-7 scores was 7.27 with a 95% confidence interval ranging from 4.60 to 9.95. The eta squared statistic (.79) indicated a large effect size. As can be seen in Figure 1, there is a decrease in mean scores from pre-treatment to the end of the 8-week programme for both the PHQ-9 and the GAD-7.

Clinical significance for depression and anxiety

Statistical significance does not necessarily mean the difference is of practical or clinical value (Jacobson & Truax, 1991). Measuring clinical significance was important to determine if the change in scores was meaningful. Only the pre-intervention and week 8 scores were used to determine the clinical effectiveness of the programme.

Table 2
Clinical significance for each participant on the Patient Health Questionnaire (PHQ-9) and Generalised Anxiety Disorder (GAD-7) at pre-treatment and end of treatment

ID	PHQ-9 (pre)	PHQ-9 (post)	Clinical significance	GAD-7 (pre)	GAD-7 (post)	Clinical significance
1	8	0	Y	6	2	N
2	8	1	Y	9	1	Y
3	4	1	N	8	2	Y
4	17	8	Y	16	2	Y
5	10	6	N	12	9	N
6	8	3	Y	14	4	Y
7	20	3	Y	14	4	Y
8	2	3	N	0	0	N
9	15	6	Y	10	3	Y
10	14	0	Y	12	1	Y
11	10	6	N	14	7	Y
Mean	10.55	3.36		10.45	3.18	
SD	5.47	2.77		4.59	2.71	

Note. PHQ-9 scores ranged from 0 to 27, with 5 levels of severity: minimal (1-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe (20-27). GAD-7 scores ranged from 0 to 21, with 4 levels of severity: minimal (0-4), mild (5-9), moderate (10-14), and severe (15-21).

On the PHQ-9 and GAD-7, Kroenke, Spitzer and Williams (2001) recommend a decrease of more than 5 on the total score from pre- to post-treatment. Table 2 lists the scores for each participants at pre-intervention and at week 8. Sixty-four percent ($n = 7$) showed clinically significant reduction in depressive symptoms, and 73% ($n = 8$) had a clinically significant reduction in anxiety symptoms. The large standard deviations,

however, indicate high variability across the scores.

Clinicical significance can also be evaluated by determining the number of participants who began the programme in the clinical range of depression and anxiety, and who were in the non-clinical level by the end of the programme. As shown in Table 2, six participants (54%) were in the clinical range on the PHQ-9 (score $\geq$ 10) at baseline, and seven (63.6%) were in the clinical range on the GAD-7 (score $\geq$10). At the end of the programme, no participants were found in the clinical range for depressive and anxiety symptoms.

Quality of life and Adjustment to tertiary study

As show in Table 3, paired samples t-tests showed a statistically significant increase in the quality of life rating on the WHOQOL-BREF subscales from baseline and at the end of treatment (week 8). The eta squared statistic for the subscales showed a large effect size (physical $\eta^2 = .53$, psychological $\eta^2 = .76$, relational $\eta^2 = .56$, and environmental $\eta^2 = .34$).

On the adjustment to tertiary study measure SACQ, paired samples t-tests showed that there were statistically significant increases in scores from baseline to week 8 (see Table 4). The eta squared statistic for the full SACQ scale and subscales showed a large effect size (full scale $\eta^2 = .80$, academic $\eta^2 = .64$, social $\eta^2 = .65$, emotional $\eta^2 = .70$, and attachment $\eta^2 = .68$).
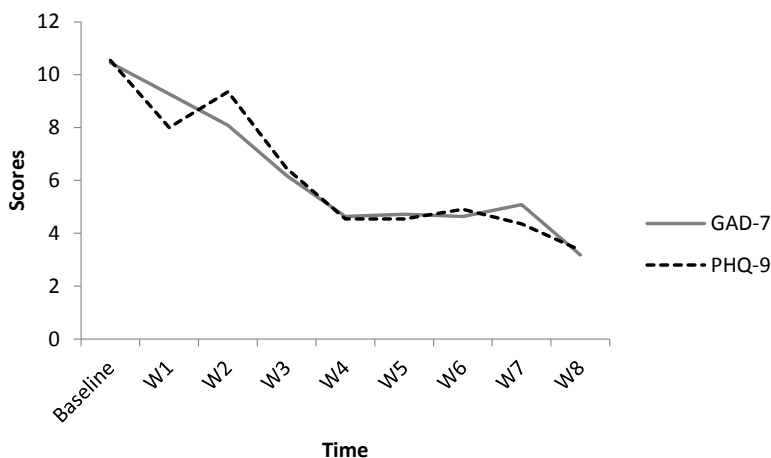

Figure 1. Mean scores on the Patient Health Questionnaire (PHQ-9) and Generalised Anxiety Disorder (GAD-7) for total sample from pre-treatment to end of treatment.

Table 3

T-tests of mean scores for total sample on the World Health Organisation Quality of Life Questionnaire (WHOQOL-BREF) subscales: At pretreatment and end of treatment

Subscales	Time	Mean	SD	Mean change	Confidence Interval*	t-value	df	p-value
Phy	Pre	65.36	9.81					
	Post	78.55	14.07	13.18	4.37-21.99	-3.33	10	.008
Psy	Pre	53.55	15.53					
	Post	72.73	12.85	19.18	11.67-26.70	-5.69	10	.000
Rel	Pre	49.36	22.96					
	Post	66.55	18.82	17.18	6.51-27.86	-3.59	10	.005
Env	Pre	61.45	14.62					
	Post	71.64	14.94	10.18	0.08-20.29	-2.25	10	.049

Note.

Phy = Physical; Psy = Psychological, Rel = Relational, Env = Environmental

*Confidence Interval is at 95%

Qualitative data on the cultural compatibility of the intervention

Compatibility of programme for Asian students

All the participants felt the programme fitted well with their culture and did not regard the intervention conflicted with their cultural values. They believed the programme was flexible enough to be applied to other cultures. As one participant noted, emotions are the same across cultures, "happy is happy" in any context. Culture was not seen as an issue, but commitment to the programme was seen as the key. As one participant said, "these books, its more improving yourself, so if people actually commit in the programme they can actually change their life. It's not because we're Asian or Caucasian, I don't think that's really related. If people actually committed, it should be ok". Some participants found that the programme taught strategies that they had learnt previously from self-help books, friends, and family.

Table 4

T-tests of mean scores for total sample on the Student Adaptation to College Questionnaire (SACQ) at pretreatment and end of treatment: Full scale and subscales

	Time	Mean	SD	Mean change	Interval range*	t-value	df	p-value
Full scale	Pre	355.91	84.19					
	Post	448.27	69.32	92.36	59.56-125.17	-6.27	10	.000
Academic	Pre	131.64	28.96					
	Post	155.82	28.85	24.18	11.54-36.82	-4.26	10	.002
Social	Pre	100.09	30.63					
	Post	133.73	24.16	33.64	16.25-51.02	-4.31	10	.002
Emotional	Pre	72.45	21.58					
	Post	96.64	22.24	24.18	13.00-35.36	-4.82	10	.001
Attachment	Pre	89.45	21.75					
	Post	109.82	15.33	20.36	10.57-30.16	-4.63	10	.001

Note. *Interval range is at 95% confidence interval

These concepts included, breaking a problem into smaller pieces, telling yourself you are good enough, talking to friends and family, and exercising more. It was highlighted that the programme would be helpful to Kiwi Asians who experience an "identity crisis"; the ones who do not feel they completely "fit" into either culture. However, the benefit of this bicultural status was the ability to "mix the best of both worlds and make it work". While all of the participants found the programme culturally compatible to their Asian upbringing, aspects of their cultures that impacted on mental health were highlighted.

Resolving problems

Participants identified that they did not have adequate ways of dealing with their problems prior to coming into the programme. The strategies participants identified they used were to ignore the problem by isolating themselves, hiding away, keeping things inside, or using alcohol and comfort eating as a way to cope. One participant identified the effect of the masculine culture in how problems were handled, especially the need to 'harden up man, get over it'. Many recognised that these strategies were not working for them.

The way Asian society handles psychological problems is perceived to be different to New Zealand society. Although some had lived in New Zealand for many years, the influence of the Asian culture was still strong. It was noted that depression is not recognised in their culture, and that people tend to deny the existence of these problems, using religion to solve their issues. Taking time to reflect seemed foreign and self-introspection as "feminine". One participant felt that the strategies he had been learnt from his family often left him unhappy and tired, in that the "Asian way is to do things the tried and true way. It's very rigid. You don't have innovation, or try different ways". One participant noted that in China, where it is highly competitive, people do not have as much time to care and offer help to those they see struggling. Thus some of the strategies covered in the programme were initially described as a "bit weird", such as taking time to reflect and come up with a plan.

Help seeking behaviour

Participants identified differing degrees of openness in expressing mental health concerns. Several participants noted that Asians are more reserved and tend not to express their emotions, especially negative feelings. Help-seeking was expressed by a number of participants as a sign of weakness. The inadequacy of not being able to handle one's problems meant they would be seen as lacking strength in character, and therefore prevented them from seeking help. Even talking to one's intimate partner was difficult as it was perceived the partner would not be able to understand why s/he suffered from depression.

Stigma and the shame associated with asking for help and seeking mental health services explained why people keep quiet about mental illness. There was expressed fear of others finding out and think they were "crazy" and not want to be friends with them. After going through the programme, one participant felt more comfortable about seek professional counselling services in the future. It was acknowledged that despite the stigma attached to seeking help in their culture, it would be helpful for everyone and should not be seen as a sign of weakness.

Another factor that added to participants' reluctance to seek help was the portrayal of positive images of Kiwi Asians' mental wellness in the media. Asians in New Zealand were perceived as "mentally stable", as they have the "lowest crime rate" and are the "high achievers in school". The high achiever image and the expectations associated with that made it particularly difficult to seek help, and seen as a sign of failure.

Although two of the participants acknowledged seeking professional help in the past, the barriers around the high cost of seeing a psychologist, the language barrier, and a lack of a positive experience prevented them from having further treatment for their problems. Thus they felt they received inadequate care from the mental health services, and eventually tried to resolve their issues on their own.

Family influence

The family was identified as a major influence as to how problems arose and how it was handled. Asian students are expected to follow their parents' wishes and not have their own opinions. Therefore if they were experiencing difficulties, some participants found it difficult to talk to their parents. When one participant tried talking to her parents about her anxiety, her parents had difficulties understanding why she had these worries telling her "You have everything. You don't have financial pressure, why do you have this kind of problems?" However, in other situations when participants could talk to their parents the distance made it difficult to communicate to them, especially if they were in China.

The role of parents in teaching the participants how to deal with psychological issues was discussed with many stating that they had not learnt simple things, like "chill out, go for a walk" when experiencing distress. As Asian parents did not express negative emotions, one participant reflected that he did not know how his parents dealt with stresses and anxieties, as they kept this hidden. He thus used similar strategies and felt that seeking help from the programme was to "expose" oneself.

It was mentioned that Asian parents were more protective of their children and managed their child's affairs, even into young adulthood. One participant noted that due to the One-Child Policy in China, children were well protected and very "self-centred". They were shielded from failures and when they experienced the "real world", they often had few strategies to manage the difficulties of adjustment. This was especially evident when interpersonal conflict arose; only-children had difficulty taking the other person's perspective and seeing their contribution to relational problems, especially after all the attention they received from parents and grandparents and there was no need to think about others.

Discussion

The guided self-help LLTTF (Williams, 2007) programme was found to be effective in reducing self-reports of depressive and anxiety symptoms, and increasing quality of life and adjustment to tertiary study for Asian students in New Zealand. Statistically significant results were found on all the outcome measures, indicating an improvement in the participants' wellbeing by the end of the 8-weeks' programme. Participants' perceived quality of life showed significant improvements in the physical, psychological, relational, and environmental domains. Participants' adjustment to studying also improved overall, with reported better academic adjustment, social adjustment, emotional-personal adjustment, and more attachment to their study institution.

Although statistically significant improvements were found, the improvements that were clinically significant were partially supported. This may be because not all participants were in the clinical range for depression or anxiety at the beginning of the programme, and therefore could not demonstrate clinical improvement by the end of the programme. However, all the participants were in the non-clinical range for depression and anxiety at the completion of the programme. Those who started the programme with more severe levels of depression and anxiety showed greater gains from the programme, compared to those with less severe levels. Although the aim behind low intensity interventions is to help people experiencing mild to moderate range of mental health symptoms, the participants experiencing moderate-severe to severe levels of depression or anxiety at the start of the programme, in fact, made the most gain from the intervention.

Overall the participants found the programme to be culturally compatible and there may be a number of reasons for this. Firstly, the programme was delivered in an educational and didactic manner that tends to match the preference and expectations of students of Asian descent when seeking help (Chen & Davenport, 2005).

Secondly, the study had a very low rate of attrition from the programme. As with all self-help interventions, attrition is a major issue. Cuijpers, Donker, van Straten, Li, and Andersson's (2010) review found that drop-out rate was higher for guided self-help compared to traditional face-to-face high intensity CBT, although the difference was not significant. This may be due to concerns about the reduced therapist contact and

therefore lack of therapeutic engagement with clients (MacLeod, Martinez, & Williams, 2009). This was not found to be case in the study. While unguided self-help programmes are more susceptible to high attrition rates (Cavanagh, 2010; Eysenbach, 2005; Waller & Gilbody, 2009), for this group of Asian students, the support from the low intensity programme was especially valuable to them. Several participants mentioned the value of having someone who guided them through the programme, someone to talk to, who monitored their progress, and motivated them to use the skills taught. One participant noted that they did not think the programme would have been as effective if it did not come with facilitator support. Despite the limited contact with the participants, some form of therapeutic relationship may have developed. As Whitfield and Williams (2003) expressed allowing clients to openly discuss their problems may enable a relationship to form spontaneously. Having a facilitator who was of the same ethnicity and age group may also help, thus enabling the intervention to be more effective. Sue and Sue (1999) found that clients who have therapists of their own ethnicity and who speak the same language, attend more sessions than those unmatched in ethnicity and language. However, it is unclear whether the effect was due to therapist contact or some other factors. The factors that contribute to the effectiveness of guided self-help need to be investigated with future research.

Another factor to consider is the particular client characteristics that increases the effectiveness of LICBI. The characteristics of service users considered important are that they should have higher motivation, commitment, self-efficacy, and lower rates of hopelessness as traits if better outcomes are to be found with low intensity options (MacLeod et al., 2009; Williams, 2001). Typically clients with milder problems would be recommended for LICBI, compared to clients with more enduring and complex problems. Other factors that contributed to greater improvements were clients who self-referred, compared to mental health referrals (Mataix-Cols, Cameron, Gega, Kenwright, & Marks, 2006). Clients who are younger with high socio-economic status and education are more likely to have successful outcomes

with self-help treatment (Schmidt & Miller, 1983). Having an internal locus of control also predicts better clinical outcomes (Mahalik & Kivlighan, 1988). Participants in the study were self-referred, younger, educated, and presumably of higher socio-economic status. They may have volunteered to take part of the study due to their motivation to succeed academically, and thus increase their expectations about the outcome from the intervention. However, Gyani, Shafran, Layard, and Clark (2013) found that while self-referrals did not predict reliable recovery, it did facilitate therapeutic outcomes and may provide an explanation for the improvements seen in the study.

A further strength of the study was the rich information gathered from participants about the cultural aspect of the intervention. Although some participants had been in New Zealand for a few years and would be expected to have some level of acculturation, most participants found some ideas introduced in the programme were novel, although some of the concepts were already known by a few participants.

For a number of participants, they identified that they did not have adequate ways of dealing with their problems, preferring to ignore the issue or hide away, thus reinforcing the belief that Asians are perceived to be reluctant and uncomfortable with expressing their emotions. Some participants identified that this reaction was due to family expectations of children remaining quiet and obedient. For the majority of the participants, seeking help was seen as a sign of weakness. To be unable to handle their problems was perceived as shameful and the stigma around mental health kept those who were struggling silent. The participants' responses echoed findings from previous research around Asians' reluctance to seek help (Masuda & Boone, 2011). Leibowitz (2010) found that ethnic minorities would only risk the shame associated with help seeking when the problems become severe. These perceptions appeared more self-imposed, rather than externally-imposed, as the participants did not recall incidences where shame was expressed about mental health problems. It may be that the cultural value of self-restraint of emotions may have become internalised

and unconscious (Foo, 2007).

The positive portrayal of Asians in the media added to participants' reluctance to seek help, as it was seen as breaking the stereotype of Asians as high achievers and psychologically stable (Leibowitz, 2010). Despite this perception, it was interesting to note that a high percentage of males took part in the study. This may indicate a desire for support in an environment where they feel safe to disclose, and they are highly motivated to seek help particularly when academic success was important and the fear of failure was high. Low intensity programmes, particularly those that are guided, may be more acceptable and less stigmatising than more intensive psychological interventions (Williams, 2001).

Families have a strong influence on shaping their child. Family supportiveness in emotional problems varied amongst the participants, with some parents offering support, while others neglected to offer help. Asian parents were described generally as protective and over-involved. Due to the expectation that parents have control over children's education and decisions, Chinese children may be perceived as dependent and lacking maturity, compared to their peers in Western society (Sue & Sue, 1999). One participant noted the effects of China's One-Child Policy, with children growing up with all the attention of the family and becoming very self-centred. They are shielded from failures and have difficulty overcoming obstacles once they leave the family's protection. It can be expected that children growing up in this protective environment will have more difficulty adjusting, dealing with conflict, and relational issues in later life. The One-Child Policy was implemented in 1979, and there is still a lack of research to determine the social and emotional effects of this change in society.

An unexpected finding that arose from the interviews was the lack of socialisation that some participants experienced from their families in dealing with emotional problems. A couple of participants expressed distress at the perceived neglect by their parents in teaching them coping strategies for dealing with problems or showing

any sign of emotionality in the family. These two participants were also the ones that reported higher levels of severity in depression and anxiety at the beginning of the programme. This may seem to contradict the image of family closeness usually associated with Asian families (Mondia, Hichenberg, Kerr, Eisenberg, & Kissane, 2012). However, whether this report is more unique to the particular individual's family system or more systemic to the Asian culture is uncertain. While familial closeness is not necessarily equated with greater psychological health, more would need to be explored about the expression of emotional functioning in Asian families and its impact on mental health and wellbeing.

Despite participants reporting that the programme had met or even exceeded their expectations, they found parts of the programme were not suitable or helpful. For example, the programme's manualised delivery was too restricting with limited flexibility in the structure of the content of the LLTTF programme. These sentiments were echoed in Boyle, Lynch, Lyon, and Williams study (2011), with suggestion that the programme needs to be adapted to meet the specific needs of the participants, with a focus on problem-solving strategies. While the language of the programme is couched in a way that makes it readily comprehensible to people with a low reading level, there was mixed response to the way some concepts were conveyed. Some participants found the content too simplistic and others found it too complex.

The findings need to be interpreted within the context of the limitations of the study, namely methodological shortcomings, such as the insufficient baseline data, lack of follow-up data and small sample size, English as a second language, and social desirability.

The methodological shortcomings to the study restricts any generalisations that can be made about the findings. The lack of a control group, and follow-up data makes it difficult to fully rule out whether the improvements seen were due to beliefs about getting support and hence can be explained by the placebo effect (Kaptchuk, 2002). Also without an adequate baseline of symptoms, it cannot be ruled out whether the decrease

in depression and anxiety were typical fluctuations in symptoms over time rather than due to treatment effect. Additionally, follow-up data a few weeks after the completion of the programme would have established whether the treatment effects were sustained over time. The data was also reliant solely on self-report. Other collateral information such as the student's academic grades would have enhanced the findings as to the effectiveness of the intervention.

Usually small sample sizes would limit the power of the analysis, although Isaac and Michael (1981) asserted that small samples were more appropriate for exploratory research. Although the participants were Asian students studying in the Auckland area, they presented with problems similar to those seen in the general community, such as stress, low mood, and anxiety being the most prevalent issues reported (Fitzgerald, Galyer, & Ryan, 2009).

For the majority of participants, English is not their first language but all the materials were presented in English. Although the facilitator could explain the terms in Mandarin, if necessary, and the concepts were relatively simple, a lack of language proficiency may have constrained the participants from fully understanding and engaging with the concepts discussed and/or ability to express themselves. This may have affected their self-report on some of the measures as well, as they contained idioms which required the researcher to explain. For example, "Lonesomeness for home is a source of difficulty for me", and "Sometimes my thinking gets muddled up too easily". Abe et al. (1998) also found that international students may experience difficulty understanding questions such as "Lately, I have been feeling blue and moody a lot", and "I haven't been mixing too well with the opposite sex lately."

Furthermore, with all self-reported subjective measures, the findings are susceptible to social desirability bias (Nederhof, 1985). Social desirability may also come in the form of the researcher who was also the facilitator, and may bias the results in a positive direction unintentionally. This is especially true for the Asian participants, as their cultural value of avoiding shame would make them more reluctant to reveal

unfavourable information that would jeopardise this (Bond & Smith, 1996; Williams, Foo, & Haarhoff, 2006). Also, the value of maintaining collective harmony may make them hesitant to reveal what they really thought about the programme, but tell the facilitator what they think she wants to hear (Jones, 1983). The high retention rate of participants in the programme, however, would indicate that social desirability may not be a particular issue. If the programme had not been useful for the students and, given the high workload and demands of studying at a tertiary institution, non-attendance or drop-out rates would have been observed fairly early on. This provides further evidence for the utility of the programme for the participants, and possibly of an unmet need for this group. In spite of the positive findings from the study, it is important that the findings be moderated in the light of the cultural values of the participants. More research is needed to develop culturally appropriate interventions and measures for Asians. Hall (2001) called for psychotherapies for ethnic minorities to be both empirically supported and culturally sensitive. This is the only study that has used the LLTTF programme with East Asian and Southeast Asian students. As the LLTTF programme can be delivered online, in group or one-on-one, it would be interesting to determine the format that Asians would prefer and how effective the differing delivery styles would be. Cultural adaptations for low intensity CBT programmes have not yet been establish, although Mandarin versions of LLTTF materials are currently being developed by Dr. Chris Williams (personal communication, April 5, 2013), and this version may be more appropriate for those with limited grasp of the English language.

Given the increase of Asian students coming to New Zealand and the specific needs and difficulties experienced by international students, tertiary education counselling centres may need to be prepared to encounter issues outside their normal scope of practice. Asians have difficulty adjusting to New Zealand culture and face more discrimination, as they are not able to visually 'blend' into White society due to their distinct physical features (Williams & Cleland, 2016). Practitioners need to provide

culturally appropriate interventions in a culturally appropriate manner (Anderson et al., 2003). Although Asians tend to prefer a more directive, practical approach in therapy, it is important not to stereotype, but to consider the individual needs and experiences of the client (Chen & Davenport, 2005; Foo, 2007; Hwang, 2011; Sue & Sue, 1999). As this study found, ethnicity match with the facilitator may have been a factor to the high retention rate. When providing interventions, clients who have therapists of their own ethnicity, speaking the same language, would attend more sessions than those unmatched in ethnicity and language (Sue & Sue, 1999).

Programmes to help Asian students better adjust to their host culture and engage with social groups outside their ethnic group could be encouraged. Not only would this be important for assisting international students' better adjust to the psychological and academic demands of studying overseas (Leung, 2001), but those with well-established and healthy social supports are more likely to achieve academically (Crede & Niehorster, 2012).

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Help yourself to CBT: Investigating clinically significant change in a low intensity programme for low mood

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The aim of the research was to examine the clinical significance of a low intensity cognitive-behavioural guided self-help programme for a community sample of individuals experiencing depression and low mood. The intervention was provided either face-to-face or over the telephone depending on the participant's preference. The study used a two-group repeated measures naturalistic design. Participants were assessed weekly during the six-week programme, with follow-up assessments at six and twelve weeks. Thirteen participants completed the programme. Low mood was measured by the nine-item Patient Health Questionnaire (PHQ-9), and quality of life was measured by the short form Quality of Life and Enjoyment Questionnaire (QLES-SF). Results showed a clinically significant reduction in depressive symptoms and increase in quality of life ratings. The results provide preliminary support that a cognitive-behavioural guided self-help programme can benefit people experiencing low to moderate levels of depression.

Keywords: depression; low-intensity; cognitive behavioural interventions; clinical significance

Depression is a widespread and debilitating condition. It is estimated that depression will be the second highest disease-causing burden in the world by 2020 (World Health Organization, 1992). In New Zealand, depression is experienced by as many as 20% of women and 10% of men during their lifetime, and has an overall lifetime prevalence rate of 16% (Oakley Browne, Wells, Scott, & McGee, 2006). The proportion of Māori presenting with depression is substantially greater than New Zealand European, with nearly one in three experiencing major depressive disorder at some point in their lives (Baxter, 2008). The personal cost of depression includes significant clinical morbidity, increased mortality (particularly from suicide), diminished functioning, and decreased quality of life (see Barge-Schaapveld, Nicolson, Berkhof, & deVries, 1999; Hays, Wells, Sherbourne, Rogers, & Spritzer, 1995; Klerman & Weissman, 1992; Ustün, 1999).

Despite the prevalence, severity, and the negative impact of depression, it is treatable. There are successful evidence-based interventions available, including medication, psychosocial interventions, and psychotherapies such as cognitive behavioural therapy (CBT) (Beck, 1963, 1964; Beck, Rush, Shaw & Emery, 1979).

However, because of the high demand for mental health services and a lack of resources, only the most complex and chronic cases are typically accepted in treatment. Extensive waitlists, insufficient number of practitioners, and/or costs associated with therapy means psychological interventions are inaccessible for people who could potentially benefit from psychotherapy, i.e., those with mild to moderate levels of depression and anxiety. Therefore, those who would benefit the most from psychotherapy are the least likely to receive it, and those with the most severe conditions (such as severe clinical depression, bipolar disorder) and the least responsive to psychotherapy receive it; thus further exacerbating the problem of waitlists (Williams & Chellingsworth, 2010).

These problems have led to the recent development of low intensity interventions. Low intensity refers to the low usage of specialist therapist time (Bower & Gilbody, 2005), or the usage of the therapist's time in a cost-effective way. The primary purpose of low intensity cognitive behavioural interventions (LI-CBI) is to increase access to evidence-based psychological therapies on a community-wide basis, using the "minimum level of intervention necessary to create maximum gain" (Bennett-Levy & Farrand, 2010, p. 8). As the conceptual underpinnings of LI-CBI have already been discussed by Haarhoff and Williams (2017) in this issue, the principles will not be repeated here.

One example of LI-CBI is self-help. Self-help can play an important role in increasing the client's sense of control over and understanding of their mental health, thereby preventing relapse, reducing the amount of time spent in therapy, and increasing motivation (Keeley, Williams, & Shapiro, 2002). Self-help materials have come to be seen both as psychological interventions in their own right and as an adjunct to therapist-delivered care (Improving Access to Psychological Therapies [IAPT], 2010). As an intervention, self-help involves the delivery of materials that employ different media-based format, such as printed materials, digital, or web-based programmes. Whatever the means of delivery, self-help materials aim to increase the users' knowledge about a particular problem and equip them with skills to better self-manage their difficulties (Williams, 2003). For example, bibliotherapy and internet-delivered CBT for social anxiety have been shown to be effective as pure self-help models (Furmark et al., 2009).

Pure self-help, however, has been found to have high dropout rates and many do not complete the programme

(Waller & Gilbody, 2009). A seminal review by Gellatly et al. (2007) demonstrated that practitioner support led to significantly improved outcomes compared to the use of self-help on its own. For all self-help interventions, they found a medium effect size but when the analysis focused on guided self-help studies only, this increased to a large effect size. This suggests that guided self-help may be more effective than the provision of information alone.

In a practitioner-support model, the practitioner takes the role of an encouraging and supportive figure who introduces the self-help materials, monitors the individual's progress, and reviews his/her outcomes. Compared to traditional therapy, Papworth, Marrinan, Martin, Keegan, and Chaddock (2013) reported guided self-help is less intensive, requires fewer contact hours, and is cost-effective. Birchall and Palmer (2002) believed it could potentially be empowering for clients as well. The use of guidance can facilitate the implementation of high-quality evidence-based treatment and act as a step up to more intensive treatment if required.

A number of studies have demonstrated substantial improvements in mental health symptoms using guided self-help models (Ghaderi & Scott, 2003; Hirai & Clum, 2006; Priemer & Talbot, 2013; Williams et al., 2013; Williams & Whitfield, 2001). Currently, low intensity interventions are recommended by the National Institute for Health and Care Excellence (NICE; 2004, 2009) in their clinical guidelines for treatment of sub-threshold (mild to moderate) depression and anxiety disorders. Initial results suggest that this approach to treatment have similar findings to that of traditional face-to-face type therapies (Cuijpers, Donker, van Straten, Li, & Andersson, 2010). Low intensity interventions have been successfully implemented through the Ministry of Health initiatives in England, Scotland, and Canada (e.g., IAPT (Clark, 2013); STEPs (White, 2008); Bounce Back: Reclaim your Health (Canadian Mental Health Association, 2012). The New Zealand Ministry of Health (2008) has identified the need for a stepped care approach to the mental health system, recommending that low intensity

interventions, such as self-help books, treatments delivered over the internet, and brief interventions be available for people with mild to moderate mental health problems.

The delivery of supported low intensity treatments typically employs a variety of flexible and accessible formats. Although face-to-face contact is part of this, the use of other modalities such as telephone, the internet, and social media are increasingly used to increase access and choice. These options support the delivery of low intensity interventions due to its capacity to overcome many of the physical, social, and economic barriers that prevent access to mental health services (Bee et al., 2008; Lovell, 2010; Mohr et al., 2005). The barriers may include remoteness from mental health facilities, having to travel long distances, an inability to attend treatment due to cost, work, childcare, or other emergencies.

The study's primary aim was to investigate the clinical effectiveness of a guided self-help LI-CBI for people experiencing low mood. Two forms of guided support were provided; face-to-face and over the telephone. The second aim of the study was establish the clinical significance, rather than just the statistical significance, of the observed change in low mood symptoms. Statistical significance is typically used to establish the effectiveness of an intervention. However, it would be of great value to consider the clinical significance of change as well. In traditional outcome research, the results are often aggregated, masking individual differences. This provides little or no information regarding the variability of responses both within and between individuals (Blampied, 2001; Jacobsen & Truax, 1991). For example, a statistically significant treatment effect does not make it clear whether some individuals have not changed or have even deteriorated in the treatment group. In contrast, the focus of clinical significance is to examine whether the intervention resulted in any change for the individual client in terms of their functioning and everyday life (Blampied 2001; Kazdin, 2003). In a stepped care approach to treatment, examining clinical significance can be particularly useful because it signals when clients have achieved clinically

significant change in their status and no longer require treatment, or whether a step up in treatment is needed. For the study, a two-way repeated measures, naturalistic research design was used.

Method

Participants

To be included in the study participants needed to be between 18 and 65 years of age, experiencing depressive symptoms or low mood and to be proficient in reading and writing English. They were also advised that in order to participate in the study, they could not have any major hearing or sight impediments, any major mental health diagnosis (such as substance dependency, psychosis), and any imminent risk of harm to self or others. A key focus of the study was to make the intervention readily accessible to people in the community and, therefore, there were no restrictions on gender, ethnicity, or medication use.

A total of 48 people applied to take part in the larger *Help Yourself to CBT* study via a specifically designed website, indicating their preference to participate either in a group or an individual-based guided self-help project. Twenty-six people registered for the individual support: 18 for face-to-face support and eight for telephone support. Seven withdrew prior to the baseline measures being taken, leaving 19 participants who attended the initial session. Thirteen participants completed the programme, which consisted of four support sessions over the six week programme. Six participants dropped out of the programme (five in the face-to-face condition and one in the telephone condition). The reasons for dropping out were the programme not meeting the expectations, and/or inappropriateness of the modality for the participant's needs.

The results are based on the 13 participants who completed the programme. The sample consisted of 11 females and two males, with a range of ages (mean age = 41, *SD* = 11, range = 25–64). The majority of the sample identified their ethnicity as New Zealand European (69%). Two participants identified as British and one as Macedonian. Fifty four per cent of the

sample were married or in a relationship, and over half (62%) were employed either in full- or part-time positions. Seventy-seven per cent of participants had received previous therapy, ranging from talking therapy only to in-patient treatment. Three participants (23%) were currently taking antidepressant medication for their problems.

Measures

All authors of the measures utilised were contacted regarding weekly use and this was deemed appropriate.

Patient Health Questionnaire Depression Scale (PHQ-9)

The PHQ-9 (Kroenke, Spitzer, & Williams, 2001) is a 9-item self-report measure of depression that assesses both diagnostic criteria and severity of depression. Participants are asked to identify how often they have been troubled by these symptoms in the past two weeks on a 4-point scale (0 "not at all"; 1 "more than half the days"; 2 "several days"; 3 "nearly every day"). with a maximum score of 27. The authors suggested cumulative scores of 5, 10, 15 and 20 be used as cut-off points to indicate "mild", "moderate", "moderately severe" and "severe" depression respectively. Cronbach's alpha coefficient for the measure was $\alpha = .89$.

Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (QLES-SF)

This is a 16-item short form of the QLES questionnaire (Endicott, Nee, Harrison, & Blumenthal, 1993). It measures quality of life on the domains of physical health, subjective feelings, leisure activities, social relationships, general activities, satisfaction with medication, and life satisfaction. Participants are asked to rate how satisfied they have been over the last week on a 5-point scale from 1 ("very poor") to 5 ("very good"). The QLES-SF scale has a cut-off value of 50.70 where participants are termed "Functional" if their scores exceed this value, or "Impaired" if their scores are below this value (Eisen et al., 2006). Cronbach's alpha coefficient for the measure was $\alpha = .94$.

Client Satisfaction Questionnaire (CSQ-8)

The CSQ-8 (Larsen, Attkisson, Hargreaves, & Nguyen, 1979) is a short version of the original 18-item CSQ that enquires about participants' opinions and conclusions regarding the services they have received. The anchors for the responses differ according to the question, but all are based on a 4-point scale, with higher scores pertaining to greater satisfaction. Examples of items include "How satisfied are you with the amount of help you have received?" (1 ["quite dissatisfied"]; 2 ["indifferent or mildly dissatisfied"]; 3 ["mostly satisfied"]; 4 ["very satisfied"]), and "Have the services you received helped you to deal more effectively with your problems?" (1 ["no, they seemed to make things worse"]; 2 ["no, they didn't help"]; 3 ["yes, they helped somewhat"]; 4 ["yes, they helped a great deal"]). The maximum CSQ-8 score is 32. The measure was administered only at the end of the programme.

Overcoming Depression and Low Mood Programme

Overcoming Depression and Low Mood: A Five Areas Approach (ODLM; Williams, 2012) is a self-help book that uses the principles of low intensity CBT to treat depression and low mood. The ODLM is in its third edition and contains 16 "workbooks" within a single bound book. The workbooks are based on the "five areas" model, similar to Greenberger and Padesky's (1995) five-part model. This framework provides a structure to address the range of problems and difficulties that clients may face in the following domains: environment (life situation, relationships and practical problems), cognitions (altered thinking), emotions (altered mood), physiology (altered physical symptoms) and behaviour (altered behaviour). ODLM is designed to be used either in a pure self-help format or as a guided self-help with support provided by a practitioner.

As the book is the main component of intervention for low mood and depression, the workbooks aim to be accessible, requiring a reading age of 11–14 years, and the content is presented as jargon-free as possible. The choice of which workbook to use is what is termed a "learner-led" approach where

the workbooks can be completed in any order, after an initial module that helps the person identify his/her particular problem areas. A final exit workbook teaches effective strategies for relapse prevention. Each workbook includes a "Putting into Practice" (homework) plan to encourage application in everyday life.

Procedure

For the study, the self-help programme was delivered in a guided support framework over six weeks. Guided support was provided either face-to-face (FTF) or over the telephone (T), depending on the participant's choice. In the registration process participants were asked to choose how they wanted their self-help support to be delivered. Participants were informed about the study and asked for informed consent. To provide the baseline data, the participants were sent the PHQ-9 and QLES-SF via email to complete one week before the initial session, and then completed the same measures at the beginning of the initial session; providing two baseline data. Over the period of the six week programme, the measures were emailed each week to the participants via a link that was active for that week. The weekly data was collected for further analyses outside the scope of this article (Montagu, 2015). For the purpose of this article, the first baseline, the final week of the programme, and follow up scores were used in the analysis. Two follow-up points at six and 12 weeks' post-intervention were included to investigate if changes were sustained over time. The researcher was able to view and track the progress of the participants on a weekly basis. A total of nine data points were obtained for the PHQ-9 and the QLES-SF.

At the initial session the participants were oriented to the five areas model and the ODLM workbooks. In conjunction with the practitioner, the participants chose the problem areas they wished to work on. The workbooks most relevant to these problems were identified and the participants worked on these during the six weeks. Participants were given a copy of Williams's (2012) ODLM free of charge.

The participants were given a total of four support sessions (30-40 minutes each) over a six-week period

of the study. In the support sessions, the practitioner reviewed the homework, addressed possible difficulties in using the workbooks, provided support and encouragement, and set the pace for the workbook use. The final session focused on relapse prevention strategies. The first two support sessions were held a week apart, with the remaining support sessions a fortnight apart. Support protocols provided by Chris Williams for both FTF and T support conditions were used for the current study. The support sessions were provided by the researcher, after she received training and supervision in the use of the ODLM self-help CBT programme for people experiencing depression and low mood.

All face to face (FTF) and telephone (T) sessions were carried out at the Centre for Psychology, Massey University, Albany. Ethical approval for the study was obtained from the Health and Disability Ethics Committee (CEN/11/09/051).

Data Analysis

Clinically significant change is defined as the score at which the probability of coming from a clinical and non-clinical distribution is equal. Scores below this point are classified as the non-clinical range. Clinically significant change requires that a person is above the cut-off pre-treatment (i.e., is in the clinical range) but below this at post-treatment. Reliable change is where the change in scores must be greater than what could be due to the inherent reliability of the measure. A reliable change index (RCI) was calculated using estimates from clinical and non-clinical population distributions (means and standard deviations) for the measures from the clinical pre-treatment scores and estimates of internal reliability from the current study, and the non-clinical distribution from original validation studies (Kroenke et al., 2001; Stevanovic, 2011). Thus:

$$RCI = \frac{M_2 - M_1}{\sqrt{2}(s_1\sqrt{1-r_{xx}})2}$$

where:

M_2 and M_1 are the clinical and non- clinical distribution means

s_1 is the standard deviation of the clinical distribution at intake

r_{xx} is the internal reliability

(Cronbach's alpha) of the measure used

The pre-treatment internal reliability estimates, using Cronbach's coefficient alpha, for the PHQ-9 (α =.89) and the QLES-SF (α =.94), and the standard deviations were used in the RCI calculation. On the basis of these data, reliable and clinically significant change (RCSC) criteria were calculated.

Results

Depression

Table 1 presents a summary of the level of severity for depression on the PHQ-9 for each participant at baseline, end of the programme, and at the 12-week follow-up. The RCSC for the individuals are also shown.

For the FTF group at baseline, all participants were experiencing some level of depression with severity ranging from mild to severe. Over half of the group were in the mild to moderate range (57%), with the remaining participants experiencing moderately severe to severe levels of depression. By the end of the programme, 71% (n=5) showed a

reduction in depression severity from their baseline score, although two remained with moderately severe depression. Thus 43% achieved RCSC at the end of the programme. As can be observed in Table 1, at the 12-week follow-up point, all participants were in the mild range for depressive symptoms, and RCSC was demonstrated for six out of the seven participants from baseline to follow-up. The one participant that did not show any RCSC started the programme with mild depressive symptoms and remained at this level for the duration of the study period.

In the telephone support group, the initial baseline measures indicated 50% of the participants had moderately severe depression, with the remaining having mild to moderate depression. At end of the programme, all but one showed a reduction in their level of depression although all were in the mild to no depression level; thus 67% of the participants demonstrated RCSC. At the follow-up stage, all participants maintained the progress they had made at the end of the programme. The two participants who did not demonstrate clinical change had comparatively lower

Table 1
Summary of Changes on the Patient Health Questionnaire Depression Scale (PHQ-9) for the Face-to-Face and Telephone Support Conditions (N=13)

Participant's ID	Severity at baseline	Severity at end of programme	RCSC End of programme Yes/No	Severity at 12week FU	RCSC 12week FU Yes/No
Face To Face (n=7)					
3	Moderate	Mild	Y	Mild	Y
4	Moderately severe	Moderate	N	Mild	Y
6	Mild	Mild	N	Mild	N
8	Moderate	Mild	Y	Mild	Y
9	Moderate	Mild	Y	Mild	Y
10	Severe	Moderately severe	N	Mild	Y
12	Moderately severe	Moderately severe	N	Mild	Y
Telephone (n=6)					
13	Moderate	No depression	Y	No depression	Y
14	Moderately severe	No depression	Y	No depression	Y
15	Moderately severe	Mild	Y	Mild*	Y*
17	Moderately severe	Mild	Y	Mild	Y
18	Mild	Mild	N	Mild	N
19	Mild	No depression	N	No depression	N

Note. Categories of severity are 0–4 is no depression, 5–9 mild, 10–14 moderate, 15–19 moderately severe, and 20 severe depression. FU=follow-up; RCSC=reliable and clinically significant change.
* 6 weeks' follow-up data was only available for this client.

levels of depression at baseline.

Quality of Life

Table 2 presents a summary of RCSCs for the QLES-SF. With the exception of participant 6, all FTF participants had baseline QLES-SF scores that would be classified as Impaired (Endicott, Nee, Harrison, & Blumenthal, 1993). By the end of the programme, five participants (71%) had reached the Functional level, and this translated into a positive RCSC index. By the 12-week follow-up, only one participant remained in the Impaired group; this same client was also the most severely depressed of this group at the start of the programme.

Participants in the telephone (T) condition had higher quality of life scores at baseline compared to the FTF group (see Table 2). Only three (50%) of the participants in the T condition were in the Impaired range, and by termination all six participants (100%) had reached the Functional level. Those that increased to a Functional level at the end of treatment demonstrated RCSC and furthermore, this was maintained at the 12-week follow-up, with the exception of participant 15. This participant did not complete the 12-week follow-up measures but did provide one at six-week follow-up, and as can be seen the score

reverted to the Impaired range.

To determine if there were any statistical differences between certain demographic characteristics at baseline and follow-up (where applicable) for the outcome measures the Mann-Whitney U tests were used. Participants in both conditions (FTF and T) were combined for the analyses. There were no significant statistical differences between males and females in baseline or follow-up scores on depression and quality of life.

For those participants using medication during the programme, significant differences were found across all outcome measures at 12 weeks' follow-up, but not at baseline. However, these differences were not in the expected direction. Those using medication had a significantly higher

depression score at 12 weeks' follow-up (Md=5.50, n=4) compared to those not using medication (Md=2, n=8), U=4.5, z=1.98, p=.048, r=.57. Furthermore, participants using medication had a significantly lower median score of quality of life at 12 weeks' follow-up (Md=60.5) in comparison to those not on medication (Md=75), U=3, z=-2.23, p=.026, r=.64.

The effect size (ES) was calculated using Cohen's d which represents the size of the difference between means, and ranges from small (0.2), medium (0.5), and large (0.8). The ES for those that completed the programme in both support conditions are shown for the PHQ-9 and QLES-SF in Table 3.

Table 3

Effect Size* for the Face-to-Face and Telephone Support Conditions on the Patient Health Questionnaire (PHQ-9) and Quality of Life Enjoyment and Satisfaction Questionnaire (QLES-SF)

	Condition	End of programme	12 weeks' follow-up
PHQ-9	Face to face	1.12	2.01
	Telephone	1.60	2.80
Quality of Life	Face to Face	1.29	2.89
	Telephone	1.08	1.97

*Cohen's d

Table 2

Summary of Changes on the Quality of Life Enjoyment and Satisfaction Questionnaire (QLES-SF) for the Face-to-Face and Telephone Support Conditions *(N=13)*

Participant's ID	Baseline	End of programme	RCSC End of programme Yes/No	12 week FU	RCSC 12 week FU Yes/No
Face to Face (n=7)					
3	Impaired	Functional	Y	Functional	Y
4	Impaired	Functional	Y	Functional	Y
6	Functional	Functional	N	Functional	N
8	Impaired	Functional	Y	Functional	Y
9	Impaired	Functional	Y	Functional	Y
10	Impaired	Impaired	N	Impaired	N
12	Impaired	Impaired	N	Functional	Y
Telephone (n=6)					
13	Impaired	Functional	Y	Functional	Y
14	Functional	Functional	N	Functional	N
15	Impaired	Functional	Y	Impaired*	N*
17	Impaired	Functional	Y	Functional	Y
18	Functional	Functional	N	Functional	N
19	Functional	Functional	N	Functional	N

Note. Functional and impaired correspond to above or below the cut-off of 50.70 respectively (Eisen et al., 2006). FU=follow-up; RCSC=reliable and clinically significant change.
* 6 weeks' follow-up data was only available for this client.

For the PHQ-9, both support conditions demonstrated a large ES at the end of the programme, and this increased at follow-up. Similar results were shown for the QLES-SF for both conditions; in that large ES were demonstrated at the end of the programme, and this increased at follow-up.

Participant Satisfaction with the Programme

Each participant's score on the CSQ-8 is shown in Figure 1. The scores ranged from 20 to 32, with the average score being 28. The high level of rating showed the participants were satisfied with the programme.
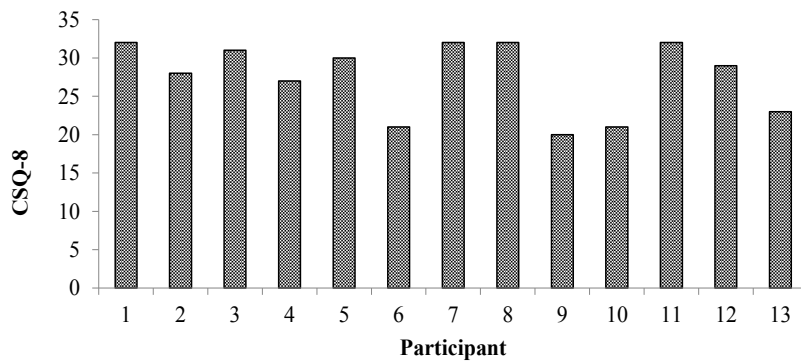
Figure 1. Client Satisfaction Questionnaire (CSQ-8) scores for each participant

Discussion

The aim of this study was to investigate the clinical significance of a guided self-help treatment programme *Overcoming Depression and Low Mood* (Williams, 2012) for individuals in the community experiencing low mood. Conventional statistics typically used in treatment outcome research enables pre- and post-treatment differences to be investigated, but provides little information about the clinical significance of the changes. Thus reliable and clinically significant change (RCSC) methodology was used in this research. RCSC has a number of advantages: the reliable change index (RCI) sets the criteria for determining whether the magnitude of observed change is spurious (attributable to measurement error), and the RCSC determines the clinical meaning of the observed change. Employing these criteria, the results showed there were improvements in symptoms of depression and quality of life for the participants.

Overall, of those who completed the programme, seven of the 13 participants (54%) demonstrated RCSC in depression as measured by the PHQ-9 by the end of the programme, and this increased to 10 participants (77%) by 12 weeks' follow-up. Eleven participants (85%) showed clinically significant change in quality of life scores as measured by the QLES-SF at the end of the programme and this was the same at 12 weeks' follow-up. These findings highlight the magnitude of clinical change that was experienced by participants across the duration of the programme and, furthermore, not only the maintenance of these gains at the follow-up period, but also the number of individuals who may not have achieved clinical change by the end of the programme, but did so at the follow-up points. These results indicate that on an individual level, change was clinically meaningful over this time and the effect sizes were strong. It needs to be noted that participants who initially scored low on symptom measures (i.e., in the non-clinical range) were not able to demonstrate RCSC across time as a result of the criteria. For example, in this study there were three individuals who scored in the mild range for depression who improved over the course of the programme and although they did not meet criteria for RCSC, it is likely this change was significant on an individual level. In an RCT or research study that focused on pre-post change only, these changes would have been lost.

The measure of client satisfaction administered to participants post-programme indicated that the guided self-help programme was well received. Participants were similarly satisfied with the guided self-help programme, whether they had received face-to-face or over-the-telephone support. These results are in agreement with the literature that suggests telephone guidance is just as effective at reducing levels of depression as face-to-face guidance (e.g. Hammond et al., 2012). New Zealand has a large rural population and access to mental health services is not easily available. The positive finding from the telephone support group would suggest that this mode of support could be useful when face-to-face contact is not possible, providing mental health for those suffering mild-moderate levels of depression.

Qualitative feedback was also gained from participants post-programme (including some who had dropped out). While the majority of the feedback was positive, reflecting the self-report CSQ-8 measure, information about what participants liked or did not like about the programme was obtained. One participant reported that the book was at times too simple, and that the material did not answer his questions, leading to him feeling frustrated. Some noted that the programme didn't sufficiently address all their needs, and that it was difficult to put the skills into practice, particularly due to having to focus on other events going on in their life. Participants also noted particular workbooks were useful, such as "Overcoming Anxiety and Avoidance "and "Doing Things to Boost How You Feel". Others noted the biggest hurdle to seeking help for their recovery was a lack of funds and appreciated the provision of the workbooks free of charge. The literature notes that cost is a prohibitive factor in people being able to access mental health services, and that the cost-effectiveness of unguided and guided self-help may be an avenue in which people can access such help (Scogin, Hanson, & Welsh, 2003).

This study contributed some important observations associated with clinical outcomes of low-intensity delivered mental health care. It has provided initial evidence that a guided self-help CBT programme can improve mental outcomes for a community-based population, with minimal input and cost. This is true for those experiencing mild to moderate symptoms, but also for those with more severe levels of depressive symptoms. Some studies have questioned the suitability of self-help interventions for those with severe depression (e.g. McKendree-Smith, Floyd, & Scogin, 2003). However, the current study found that participants who were initially classified as moderately severe or severely depressed made clinically significant improvements on outcome measures of depression.

This research project also reflects a new trend in mental health services, which is to offer a variety of supportive interventions (e.g., face-to-face and telephone options), as not all consumers will engage with one type of service. Further, this study attempted to reduce to a minimum the criteria placed on individuals receiving LI-CBI in order to validate the premise of making psychological interventions as available

as possible. These aspects are in keeping with the rationale for why low intensity interventions were developed; to increase access to treatment for those requiring it (Bennett-Levy & Farrand, 2010). Thus the design of the current study reflected the way in which empirical research is being conducted in that it represents cases typically found in clinical settings, such as using a self-referred community sample with a comorbidity of disorders. The results and its application may be more suitable to clinical practice rather than that of a randomised control research sample.

Having highlighted the strengths of this research, it is important to remember that no study is without its limitations. The small sample size or the lack of a sufficient number of baseline period (e.g., three baseline points) limits the generalisability of the results.

Employing participants who self-select through media advertisements has its criticisms. As Gellatly et al. (2007) noted significantly higher effect sizes are generally reported compared to those from a clinical population. Individuals who self-refer may have higher motivation levels and different demographic characteristics to clients who are referred from a primary care setting (Coull & Morris, 2011). It is noted, however, that the IAPT initiative now encourages self-referrals to low intensity interventions as less sessions are required for successful outcome, thus reducing the cost and length of interventions needed (Clark, 2016; Freeston, 2016).

Overall there was a relatively high level of attrition in this study (37%), although this figure is similar to other low-intensity studies and traditional CBT research (Bilich, Deane, Phipps, Barisic, & Gould, 2008; Wierzbicki & Pekarik, 1993). It was pleasing to note there was considerably less attrition in the telephone condition (14%) compared to the face-to-face condition (42%). Previous studies also demonstrated lower levels of attrition in tele-psychotherapy than face-to-face interventions (e.g., Mohr, Vella, Hart, Heckman, & Simon, 2008; Palmer, 2002). A potential explanation for the lower attrition rates is that telephone use may reduce the barriers arising from transportation problems, lack of services in the area, childcare problems, lack of time, and social stigma (Parsonson & Stokes, 2012). Furthermore, by allowing participants to choose their mode of support may have increased the accessibility and acceptability of the intervention than if participants had been randomised to a particular support condition. This is likely to increase participants' engagement and adherence to the programme.

An additional limitation is that the researcher was also the facilitator of all of the face-to-face and telephone support sessions. This could lead to an unintentional bias towards a positive finding, thus future research should look towards employing an LI therapist that is independent of the researcher role.

The LI-CBI programme, however, is not part of a stepped care model of delivery, as in England for example. This meant that participants who did not improve with the LI intervention were unable to be "stepped up" if required, and is a serious limitation of the study. In order to effectively deliver LI-CBI, the New Zealand mental health system would need to be structured in a way that facilitates referral to higher intensity care if needed.

In summary, this study provides preliminary evidence of the effectiveness in the clinical significance of a guided self-help programme for a community sample of New Zealanders. This study is one of the first of its kind to be implemented within a New Zealand population, and the results are promising and indicate further research should be conducted in this area. Furthermore, this research supports the New Zealand Ministry of Health's (2012) initiative to implement a stepped care system within the primary mental health sector, and suggests that these new methods of mental health support are likely to be well received by New Zealanders.

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Conflicts of Interest

The authors declare no conflicts of interest.

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Regular outcome monitoring in a Low Intensity-Cognitive Behavioural Intervention: A case study approach

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Regular monitoring of client progress has been shown to enhance psychotherapy outcomes, yet this is not common in everyday practice. Regular monitoring allows for the examination of individual change trajectories, which provides important information about when change is occuring and can predict deterioration in outcome early in treatment. This paper presents two case studies of individuals who participated in a guided self-help low intensity cognitive behavioural intervention (LI-CBI); Overcoming Depression and Low Mood (Williams, 2012). Differing trajectories of change are demonstrated in the case studies. The outcomes are reviewed in terms of change in depression (PHQ-9), psychological distress (CORE-10), and quality of life (QLES-SF). The case studies have been anonymised to protect the identity of the individuals.

Keywords: routine outcome monitoring, session-by-session monitoring, low-intensity CBT, self-help, change trajectories, shape of change

Routine outcome monitoring and feedback on therapeutic progress has been described as an important feature of good clinical practice, with some arguing that monitoring procedures should be integrated into routine mental health care (Lambert, 2010). Monitoring of progress is integral to evidence-based therapies, and is the foundation upon which cognitive behavioural therapy (CBT) interventions lie. Routine outcome measurement promotes treatment planning and can also be used to support the clinical justifications of clinical interventions (E. A. Duncan & Murray, 2012). While routine monitoring is often associated with outcomes, it can also include the therapeutic processes that impact on outcomes. For example, monitoring client factors such as engagement and motivation to change, emotions, expectancies, self-esteem, and self-efficacy, or therapist factors such as working alliance (B. Duncan, Miller, Wampold, & Hubble, 2010; Norcross & Lambert, 2011).

Progress can be monitored at different levels; for example, treatment services, therapists, clients, session by session, and episodes within sessions, and feedback on progress can be usefully delivered to clients, therapists, managers, service designers and policy makers (Barkham, Mellor-Clark, & Stiles, 2015). The literature demonstrates the benefits of routine outcome monitoring for clients and therapists. For example, Youn, Kraus, and Castonguay (2012) noted the advantage of communicating feedback to clients. They suggested that the detection of even slight improvements can reassure skeptical clients of tangible progress, and this can further improve the therapeutic alliance. On the other side of the therapeutic relationship, Lambert, Harmon, Slade, Whipple, and Hawkins (2005) demonstrated that when therapists obtained information about their client's progress there was a significant and substantial effect on the client's outcome, in particular for those who had an initial poor response to treatment. That is, when therapists received feedback on such cases (poor responders), the percentage of poor responders decreased from a baseline of 21 per cent to 5 to 13 per cent. Reliable and clinically significant change rates not only reduced patient deterioration but also led to clinically meaningful outcomes when feedback conditions were compared to the no-feedback/treatment as usual control group (Lambert et al., 2005).

Unfortunately, clinicians' views of their client's outcome tends to be much more positive than that obtained from self-report measures. Walfish, McAlister, O'Donnell, and Lambert (2012) found that clinicians estimated 85 per cent of their clients improved or recovered from their treatment, yet this estimate far exceeds the outcomes typically found in clinical trials and routine care. The discrepancy between clinician estimates of success and measured success further indicates the importance of formally measuring and monitoring treatment response.

Despite the research, regular assessment of psychological states and processes throughout therapy is not common in everyday clinical practice (Hatfield & Ogles, 2004; Ionita & Fitzpatrick, 2014; Phelps, Eisman, & Kohout, 1998). James, Elgie, Adams, Henderson, and Salkovskis (2015) found that within a child mental health service, only 6.8 per cent of therapists reported 'almost always' utilising session-by-session routine outcome measures. Those who objected to session-by-session monitoring expressed concerns as to how the information would be used. For example, would it be used for performance management or to compare therapists with each other? It was also asserted that outcomes measures, viewed in isolation, did not take into account the complexity of the therapeutic relationship. In addition, clinicians noted the disadvantages of the extra work involved, such as it being time consuming to collect and score the measures, and that it used up valuable therapeutic time. Of particular concern was that getting clients to complete the measures might interfere with the development of a collaborative therapeutic relationship. Belazi, Goldfarb, and He (2002) described other potential barriers to

routine outcome measurement such as cost, practicality, clinical relevance, and a lack of knowledge over which measures to choose. Trauer, Gill, Pedwell, and Slattery (2006) suggested that routine outcome measurement had failed to become embedded in practice due to resistance to innovation and change in the health services' routine practice. For example, in a treatment outcome research study of a brief psychological intervention in primary health locations, Fitzgerald, Galyer, and Ryan (2009) could only obtain a small proportion of the data available (12 per cent) for analysis. This was mainly because of a resistance by clinicians to collect the data on their clients' outcome and this greatly diminished the weight of the findings about the effectiveness of the service.

The Improving Access to Psychological Therapies (IAPT) initiative has seen the large-scale prioritisation of routine outcome measurement in England so that it has become a fundamental component of clinical practice (Fonagy, Matthews, & Pilling, 2005). The evaluation of two pilot IAPT services highlighted the significance of regular outcome monitoring by comparing pre- and post-treatment data (Clark, 2011). The results indicated that those individuals who had missing post-treatment data (that is, their outcomes were not regularly measured) were significantly less likely to show improvement from treatment. Furthermore, the services ran the risk of overestimating their effectiveness when these cases were eliminated for evaluation (Clark, 2011).

In general, measurement of the clients' mental health condition before treatment establishes their current and baseline situation, and assists in the identification of the goals for treatment. For low intensity interventions with people experiencing mild to moderate psychological conditions, this is even more important. Ongoing monitoring before and during therapy ensures that the most appropriate evidence-based intervention is matched to the client's mental health state, and that the intervention provided will be the least burdensome in order to maximise the client's recovery. It also enables continual monitoring of risk, whether to self or others, the reviewing of the

individual's progress (which overcomes the potential problem of the therapist becoming distanced from the client; and so that the intervention can adjusted to the client's progress, or the client stepped up to the next level of care if needed), and for the evaluation of the service's effectiveness and quality (Proudfoot & Nicholas, 2010).

Session by session assessment can provide important information about the individual nature of change in a client's condition. For example, knowing the 'shape' or nature of change during treatment can provide the therapist with a more accurate understanding of when most of the change is occurring for the client. This provides information regarding the particular points in therapy to focus on in order to identify the process of change and the variables related to the change. For example, Lambert (2010) noted that deterioration in therapy could be predicted before it occurred by utilising information about the client's distress level and difficulties at the beginning of therapy and their response to treatment in early sessions.

Researchers have described three distinct shapes of change or patterns that can predict symptom improvement in CBT for depression: early rapid response, sudden gains, and the depression spike (Hayes, Laurenceau, Feldman, Strauss, & Cardaciotto, 2007). (As this article is concerned with early rapid responding, see Tang & DeRubeis (1999) and Hayes, Beevers, Feldman, Laurenceau, & Perlman (2005) for further information on sudden gains and depression spikes, respectively). Early rapid response patterns are shown by "early responders" in which clients show significant positive change within a small number of sessions (Lambert, 2013). Ilardi and Craighead (1994) characterise early rapid response as a substantial decrease in depressive symptoms by the third week of therapy, with 60-80 percent of total decrease in depression occurring by week four (note: they had two sessions per week so this would be in the eighth session), with a subsequent levelling off in change. An early response to therapy was also positively related to better intermediate and long-term outcomes (Lambert, 2005; Renaud et al., 1998). However, at present there is a lack of agreement on what is an early responder, as it may be

based on clinician ratings, reduction of symptoms, deviation from expected rates of improvement, or other methods (Haas, Hill, Lambert, & Morrell, 2002).

Other change trajectories have also been identified for different clinical presentations (e.g., Heimberg & Becker, 2002; Stulz, Lutz, Leach, Lucock, & Barkham, 2007). Stulz et al., (2007) found five different slopes of change in a sample of 192 outpatients receiving psychotherapy for anxiety and depression. The shapes of change were associated with different treatment outcomes and duration of treatment. For instance, of two groups who demonstrated initial medium impairment (one showed continuous improvement, the other discontinuous improvement), the discontinuous change group showed more reliable improvement than the continuous change group (44 vs 19 per cent, respectively). This indicatess that a discontinuous pattern of change did not necessarily predict poorer outcome. Furthermore, of the, the researchers recommended the 'early improvers' group would not require a large number of sessions or long-term therapy. Overall, the study indicated that the identification and predication of early shapes of change can provide important information to support outcome management, facilitate early identification of clients at risk of treatment failure, and provide feedback to therapists.

It is important to note that the patterns of change described above are discontinuous and non-linear, and as a result would not be apparent in just a pre-post analyses of group data (Laurenceau, Hayes, & Feldman, 2007). Session-by-session assessments provide information on important transition points that can reveal what it is therapists are doing that facilitate change in clients at this time (Hayes et al., 2007).

The purpose of this article is to demonstrate the importance of session-by-session monitoring in a low intensity cognitive behavioural intervention. Two case studies are described to demonstrate two differing trajectories of change – a successful response to LI-CBT and a poorly responding client. These case studies serve to highlight how regular monitoring can inform a practitioner's decision making for clinical interventions.

Background to the study

The two case studies were part of a larger study that investigated the effectiveness of a low intensity supported self-help programme using the book Overcoming Depression and Low Mood (ODLM): A Five Areas Approach (Williams, 2012). It is important to recognise that as this article was part of a larger study which was designed to be an effectiveness study, regular outcome monitoring was retrospective. Thus in this article, clients were not given feedback as to their progress during the study, nor was adjustment made to the intervention dependent on clients outcome. Rather, regular outcome monitoring allowed tracking of indiviudal progress and was in line with the low intensity premise of monitoring and evaluation.

The ODLM book is designed to be used either in a pure self-help format or as a 'guided' self-help intervention, where support is provided by a practitioner as the individual completes the intervention. The ODLM book is the main component of the intervention and is made up of smaller workbooks, which were used in what is termed a "learner-led" approach, where the workbooks can be completed in any order after an initial module helping the client identify their particular problem areas. Each workbook includes a "Putting into Practice" (homework) plan to encourage application in everyday life, and is supported by the practitioner to do this. For the study the first author (AM) provided the support and clinical supervision was provided by the seond author (MW). As the study is described in more detail in the Montagu and Williams (2017) article in this Special Series, only a brief outline of the recruitment, procedures, and measures will be given here.

Recruitment

The two participants were volunteers from the general community who responded to an advertisement about the study, and fulfilled the criteria of the study (i.e., be experiencing low mood, have no major mental health diagnosis (such as substance dependency, psychosis), and have no imminent risk of harm to self or others).

Procedure

The two individuals were given a choice on the type of support they wanted to receive (face-to-face or telephone) when applying for the study. They were given a total of four support sessions (30-40 minutes each) over a six-week period. Regardless of the support condition, the first support session was carried out face-to-face, at the Centre for Psychology in Albany, Auckland. For the face-to-face individual, the three remaining support sessions were carried out at the Centre; whereas for the telephone support individual, the remaining sessions were carried out over the phone. At the initial session they were oriented to the 'five areas model' and the ODLM workbooks. In conjunction with the practitioner, the individuals chose the problem areas they wished to work on. The workbooks most relevant to these problems were identified and the individuals worked on these during the six weeks of the study. In the support sessions, the practitioner reviewed the homework, addressed possible difficulties in using the workbooks, provided support and encouragement, and set the pace for the workbook use. The final session focused on relapse prevention strategies.

The outcome measures (see below) were emailed to the individuals to complete one week before the initial session, and again at the beginning of the initial session; providing two baseline data. The measures were emailed every week over the six-week programme via a link that was active for that week only. Two follow-up points at six and 12 weeks' post-intervention were included to investigate if the changes were sustained over time.

Early rapid response analysis

An early rapid response to the low intensity intervention was deemed to have occurred if there was reliable and clinically significant change (Jacobson & Truax, 1991) in depression severity by week three of the programme. (For further information on how reliable and clinically significant change was calculated please see Montagu & Williams, 2017; this issue). Week three was chosen due to the evidence from previous studies that saw change by this time period (Delgadillo et al., 2013; Vaz, Conceição, & Machado, 2013).

Measures used were

Patient Health Questionnaire Depression Scale (PHQ-9)

The PHQ-9 (Kroenke, Spitzer, & Williams, 2001) is a nine-item self-report measure of depression that assesses both diagnostic criteria and severity of depression. Participants are asked to identify how often they have been troubled by these symptoms in the past two weeks on a four-point scale (0 "not at all"; 1 "more than half the days"; 2 "several days"; 3 "nearly every day") with a maximum score of 27.

Clinical Outcomes in Routine Evaluation-10 (CORE-10)

The CORE-10 is a brief 10-item form of the original 34-item CORE-Outcome Measure (OM) developed by Evans (2000) and measures 'psychological distress'. The CORE-10 (Barkham et al., 2012) is recommended for use session-by-session to monitor change in the domains of depression, anxiety, general and social functioning, physical symptoms, trauma and risk to self. Items are scored on a five-point scale from 0 ("not at all") to 5 ("all the time") and are totalled to give a cumulative clinical score (ranging from zero to 40).

Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-SF)

This is a 16-item short form of the Q-LES questionnaire (Endicott, Nee, Harrison, & Blumenthal, 1993). It measures quality of life on the domains of physical health, subjective feelings, leisure activities, social relationships, general activities, satisfaction with medication and life satisfaction domains. Participants are asked to rate how satisfied they have been over the last week on a five-point scale from 1 (very poor") to 5 ("very good")".

All participants agreed to the weekly administration of the measures and took approximately six minutes to complete the measures.

Data analysis

For each case study, the data were standardised and averages calculated at each time point on each of the three measures, and then converted to z-scores so that the relationship between the outcome measures across time on the same scale can be viewed.

Case studies

Case study 1: John (Face-to-face support condition)

John was a 33-year-old New Zealand European male who had recently returned to New Zealand after a number of years living overseas. At the time of the study, he was employed in full-time work though over a few different jobs. He had a familial history of depression and had previously experienced depressive episodes in which treatment consisted of medication and cognitive behavioural therapy (CBT). He was not using medication at the time of the study. In addition to low mood, John reported feeling anxious when he was alone, which was often during the week while he was between jobs. John stated he was interested in participating in the programme to "learn skills to deal with his depression". At the first face-to-face assessment session, John explained his current situation and his concerns that depression would be a "normal" part of his life. He spent a lot of time alone, and experienced negative thoughts about himself as being "useless". A collaborative five areas summary was completed (see Procedure), and previous and current coping strategies were identified.

At the second support session, John had completed two workbooks as well as reading through the rest of the book. He commented that it "made sense" and his feelings were validated, however there were some aspects that he found he was unable to relate to. John reported being aware of most of the concepts in the workbooks (due to previous CBT), but was not currently putting them into practise. Thus his goal for the coming weeks was to apply the skills and techniques learnt. He set himself three workbooks to read over the following two weeks on "Assertiveness", "Unhelpful Thinking", and "Anxiety and Avoidance". John had a busy couple of weeks with work and was unable to complete all the workbooks, though he did read the "Assertiveness" workbook. He reported setting time aside for this, and "actually sat at my desk and completed it!". This gave him a sense of satisfaction and achievement, which at the time lifted his mood. Again, he mentioned sections that weren't relevant for him, but was keen to practise articulating his opinions

in order to apply in a real-life situation what he had learnt. At the fourth and final support session, John had completed two more workbooks; "Relationships" and "Noticing and Challenging Unhelpful Thinking". Reviewing the "Relapse Prevention" workbook was reportedly particularly helpful for John; in particular identifying early warning signs, which he and the practitioner collaboratively identified and listed.

Case study 1 results

The results for John on the PHQ-9, CORE-10, and QLES-SF are shown in Figure 1. Figure 1 shows John's depression trajectory from baseline to 12 weeks' follow-up on the PHQ-9. John's initial depression was defined as Moderate on the PHQ-9. His depression score demonstrated an early rapid response pattern (reliable and clinically significant change by week three). By the end of the programme (and the 12 week follow up point) his depression was in the Mild range, despite a slight increase in the last week of the programme. This increase continued until the 12 weeks' follow-up period but was still lower than his baseline score.

John's score for psychological distress, as measured by the CORE-10 was in the Clinical (versus Non-clinical) category at baseline (see Figure 1). His psychological distress was similar to his depression trajectory; that is, a decrease over the duration of the programme, then increased at six week follow up and continued to increase at the 12-week follow up point. John's CORE-10 scores at the end of the intervention and at 12 weeks' follow up were in the Non-clinical range.

Quality of life was measured by the QLES-SF (Figure 1). At baseline, John's quality of life was deemed to be in the Impaired range, though at the end of the programme (and again, at 12 weeks' follow up) it was in the Functional range. John's quality of life scores over the programme mimic that of the other outcome measures, that is, his quality of life scores steadily increased over the duration of the programme, but then declined post-intervention. However, overall his scores on the outcome measures at the follow-up were reliable and clinically significant.

Case study 2

Tom (Telephone support condition)

Tom was a 51-year-old New Zealand European male who was unemployed at the time of the intervention. He reported a history of depression and had received previous treatment in the form of medication and CBT. He was interested in participating in the study so he could learn further skills to "move forward in my life". At the first assessment session, Tom was initially reluctant to speak about his current difficulties. However he soon opened up and described symptoms including low mood, anhedonia, low motivation, increased appetite, and hopelessness; being unable to foresee any future for himself. Completing the five areas summary revealed he had thoughts of self-blame and associated feelings of anger, frustration, and sadness. He had previously attempted CBT and found it useful, and was keen to try again in a different format (i.e., LI-CBT, telephone support).
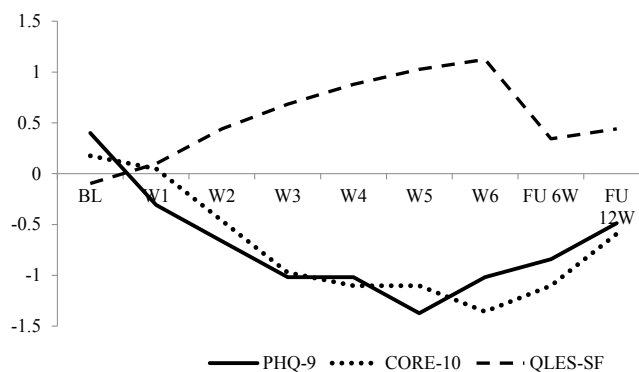

Figure 1: John's standardised scores on the PHQ-9, CORE-10 and QLES-SF across baseline, the programme, and follow-up

Tom had completed the first two workbooks by the second support session, and commented he found the timeline task (making a timeline of how his depression occured) and the "what advice would you give a friend in a similar situation" idea helpful. He sounded positive and decided that making a plan for when to do things would help him at this time. At the third session, Tom had completed one of the two workbooks he had planned to do ("Unhelpful Thinking"), although he admitted to doing this the day before the support session. In an effort to tackle internal factors that were blocking his completion of the workbooks, he planned to prioritise the workbooks and set aside time to do them. He reported finding the "Unhelpful Thinking" workbook difficult to complete due to the upsetting emotions it triggered. The week before his final support session (week five), Tom contacted the low-intensity practitioner to withdraw from the programme. He reported the workbooks weren't helping him and that they were highlighting the "enormity" of his problems. He stated he did not want to work on the future (referring to the "Relapse Prevention" workbook) when he could not find the motivation for the present. He commented that perhaps the books could be useful if his thoughts "weren't so negative".

Case study 2 results

Figure 2 show the results for Tom on the PHQ-9, CORE-10 and QLES-SF. Tom's intake depression severity was classified as Moderately Severe on the PHQ-9. As can be seen in Figure 2, compared to John, Tom's depression trajectory was more variable, in that it fluctuated between increasing and decreasing each week, whereas at week five there was a significant increase in his level of depression to the Severe level. Tom's outcome trajectories did not demonstrate an early rapid response to the intervention.

Tom's psychological distress (CORE-10; Figure 2) was in the Clinical range at baseline. Again, his trajectory was more variable and inconsistent compared to John's. It increased and subsequently decreased each week and at the time he dropped out of treatment his score was still in the Clincial range.

Tom's quality of life (QLES-SF;

Figure 2) at baseline was in the Impaired range. It initially improved up until week two but at week three decreased dramatically, though it improved again between week three and four; deteriorating again just prior to dropping out of the study.

Figure 2: Tom's standardised scores on the PHQ-9, CORE-10, and QLES-SF from baseline to termination of treatment at week five

Discussion

These case studies demonstrated two different trajectories of change to the same programme, with support provided over two modalities (face-to-face and telephone support). John's nature of change over the programme showed an early positive response, and he demonstrated reliable and clinically significant change at the end of the intervention. On the other hand, Tom did not demonstrate an early rapid response, and he deteriorated over the course of the intervention. These observations reinforce the existing literature on early rapid response in that it can predict treatment outcomes (e.g., Delgadillo et al., 2013; Stulz et al., 2007; Vaz et al., 2013). When tracking outcomes, the early identification of clients who are not responding in treatment can be provided as feedback to the clinician, with the aim of reducing the likelihood of poor outcomes. As this article is retrospective in regards to regular outcome monitoring of these two case studies, subsequent steps are suggested. For example, in routine care, Tom's practitioner could provide feedback to Tom on his early poor response, and this could then be discussed with him. Tom might then be offered an increase in the level of care – to a different modality of support, or to

a more intensive level of treatment (as in a stepped model of care) and this may have resulted in a more positive outcome for Tom.

It is important to highlight a couple of points. John's response to the face-to-face support programme initially reduced his depression and psychological distress, and improved his quality of life scores. Although this was evident over the duration of the programme, there was some deterioration on all the outcome measures at follow-up. This phenomenon could be explained by a regression to the mean (Barnett, van der Pols, & Dobson, 2004). Its occurrence is commonly observed when repeated measurements are used on the same individual or group. Extreme scores at the beginning of treatment will generally reduce to less extreme ones that are closer to the true mean for the individual or group. In the case for John, it would be expected his scores would be high for depression and distress at the beginning of treatment, hence his seeking help. However, to control for regression to the mean it is recommended that two or more baseline scores prior to treatment will get a better estimate of the client's functioning prior to treatment, and therefore a better estimate of the true impact of the intervention (Barnett, van der Pois, & Dobson, 2004).

In the study, two baseline measures were obtained; one a week prior to the intervention and the second at the first meeting where the client completed

the measures before the introduction of the ODLM programme. Observation of John's trajectory of change showed that at baseline and at week one there was little change on all the outcome measures, and that significant changes started occurring after the first week when the programme started. Thus despite the deterioration of John's scores on each of the measures at the follow up stage, his non-clinical outcomes at week six (i.e., end of treatment) were in the same non-clinical range. This supports the literature on maintenance of gains on LI-CBT, which found improvements in depression and secondary outcome measures were maintained at 12 and 30 months' post-intervention (e.g., Carlbring, Nordgren, Furmark, & Andersson, 2009; Williams et al., 2013).

For the second case study, Tom unfortunately experienced a worsening of symptoms during the guided self-help programme. Tom started the programme with more severe symptoms at the two baseline measures, and there was minimal change in his scores for all the outcome measures throughout the programme. Furthermore, his reported low motivation to complete the self-help books is a common experience in depression, and would not be ideal in a self-help programme. There has been mixed reviews in the literature with regards to the suitability of LI-CBT interventions for people with severe mental illness. Initially it was suggested that self-help interventions may be more appropriate for mild to moderate problems (Cuijpers, 1997) and unsuitable for the more serious disorders (Gregory, Schwer Canning, Lee, & Wise, 2004). On the other hand, more recent research indicates that low-intensity interventions are beneficial in the treatment of severe depression (Bower et al., 2013) but further studies would need to be done to identify whether severity of symptoms or some other factors, such as motivation, self-efficacy, or the modality of the programme, impacted on outcome. Because of Tom's current unemployment, it is likely that the programme being free appealed but on the otherhand, it may be his unemployment exacerbated his condition by giving him more time to dwell on his unfortunate situation, leading to a lack of motivation. Although Tom was initially eager to try something different

when the self-help component of the programme was explained, he may have benefited from a more intensive level of intervention.

The results of these case studies reinforce the importance and value of routine, regular and specifically focused monitoring to improve satisfactory outcomes. Utilising reliable and valid outcomes measures weekly or at every session will provide information about the nature of the client's change and assist clinician's to see if treatment is working or not, in particular for the early recognition of potential treatment failure. Thus improvements in clinical practice will be enhanced by understanding the nature of change, by improved treatment outcomes, and contribute to research as to how different disorders demonstrate change, and what the impact of different treatment components have for the change process.

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Behavioural activation self-help to improve depression in people living with dementia: The PROMOTE treatment protocol

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There is an increasing number of people living with dementia and depression, with support for people to live well with dementia becoming a global healthcare priority and seminal to the New Zealand Framework for Dementia Care (Ministry of Health, 2013). This paper overviews the clinical protocol for the PROMOTE self-help programme to inform the delivery of a written low intensity intervention based on behavioural activation for the treatment of depression and low mood in people with dementia. The primary aim of the programme is to decrease symptoms of depression and improve quality of life in people living with dementia. Support to the person living with dementia in the use of the PROMOTE programme is provided by an informal caregiver, who themselves receive guidance over the telephone by an appropriately trained mental health professional. This model of support and guidance represents a novel feature of the intervention, and one that potentially helps to increase access within the community.

Keywords: Clinical protocol, depression, dementia, behavioural activation, low intensity CBT

Background

By the year 2026, New Zealand is set to experience an 18% increase in the number of people living with dementia to over 78,000 (Alzheimer's New Zealand, 2012). This contributes to in excess of 35 million people with dementia on a worldwide scale, with this figure set to triple by 2050 (Prince et al., 2013). Given such increases in prevalence, supporting people to live well with dementia has been identified as a global healthcare priority (World Health Organisation; WHO, 2012) and seminal to the New Zealand Framework for Dementia Care (Ministry of Health, 2013). Given the current absence of a cure for dementia (Winblad et al., 2016), the provision of appropriate physical and emotional support is essential (Samsi & Manthrope, 2014)

Estimates concerning the number of people with dementia experiencing depression vary between 30% (Enache, Winbald, & Aarsland, 2011; Castilla-Puentes & Habeych, 2010) to 50% (Modrego, 2010). These estimates, alongside anticipated increases in dementia prevalence, highlight a significant need to focus on improving the long-term quality of life and wellbeing of people living with dementia (Gates, Valenzuela, Sachdev, & Singh, 2014). This is particularly justified given people with comorbid dementia and depression experience poor quality of life (Hoe, Hancock, Livingston, & Orrell, 2006), increased verbal agitation and behavioural symptoms of dementia (Van der Mussele et al., 2013), functional impairment (Thyrian et al., 2016), cognitive decline (Rapp et al., 2011) and increased risk of institutionalisation (Gaugler, Yu, Krichbaum, & Wyman, 2009). However, given the symptom overlap between depression and dementia in memory and concentration difficulties and loss of interest in activities, depressive symptoms are often misdiagnosed as signs of further cognitive decline (Pattanayak & Sagar, 2011).

Furthermore, although evidence based psychological therapies have been identified (Orgeta, Qazi, Spector, & Orrell, 2014), depression in dementia often goes untreated (Curran & Loi, 2012; Thyrian et al., 2016; van der Roest et al., 2009) even when detected. The limited availability of evidence based psychological treatments arising from high economic costs of delivery and shortage of qualified therapists (Kazdin & Blasé, 2011; Lovell, Richards & Bower, 2003) has been cited as contributing to the worldwide treatment gap (Shidhaye, Lund, & Chisholm, 2015). In attempts to overcome the treatment gap, innovative strategies to improve access to evidence based psychological therapies are being adopted worldwide (Rebello, Marques, Gureje, & Pike, 2014). Within the Improving Access to Psychological Therapies (IAPT) programme implemented across England (Clark, 2011), this has resulted in the delivery of psychological therapies within a stepped care model of service delivery (Bower & Gilbody, 2005). The IAPT programme represents a paradigm shift away from the conventional delivery of face-to-face 'high intensity' CBT by experienced and specialist mental health professionals towards the delivery of 'low intensity' CBT (Bennett-Levy, Richards, & Farrand, 2010). Indeed, 'low intensity' CBT is an approach being adopted globally (Gyani, Shafran, Layard, & Clark, 2013; Pilgram & Carey, 2012; Rebello et al., 2014; Vis et al., 2015), including New Zealand (Merry et al., 2012; Shepherd et al., 2015). Furthermore, similar programmes to IAPT have been adopted in Australia within the NewAccess initiative (Cromarty, Drummond, Francis, Watson, & Battersby, 2016).

With a low intensity approach, CBT techniques are delivered in a self-help format through written material or health technologies such as online programmes or smartphone applications (Donker et al., 2013; Ridgway & Williams, 2011) as opposed to delivery

by a therapist (Farrand & Woodford, 2013). Whilst CBT self-help can be completely self-administered, to improve the effectiveness of low intensity CBT, guidance from a health professional in the use of self-help materials often represents a core characteristic of service delivery (Andersson & Cuijpers, 2009; Gellatly et al., 2007). For example, within the IAPT programme, guidance is provided by a psychological practitioner workforce, termed Psychological Wellbeing Practitioners (PWPs). PWPs are not required to have any core professional mental health/health qualifications or previous training in the delivery of psychological therapy. Instead, this workforce receives graduate or postgraduate level training focused on the competencies required to support low intensity CBT (Roth & Pilling, 2007) and briefer than that received by high intensity CBT therapists (DOH, 2015; UCL, 2015). Increasing evidence also indicates that with similar training, support can be provided by non-professionals within community settings (McClay et al., 2015). Whilst support and guidance in the use of CBT self-help interventions results in improved effectiveness when compared to self-administered CBT self-help (Gellatly et al., 2007), uncertainty remains regarding the intensity of support and guidance required, for example guided versus minimal contact (Farrand & Woodford, 2013; Glasgow & Rosen, 1978). To maximise access and overcome barriers to face-to-face therapy, such as rurality (Vallury, Jones, & Oosterbroek, 2015), lack of financial resources (Parikh et al., 2014) and physical health problems (Matcham et al., 2014) support can be provided over the telephone, email or face-to-face (Bennett-Levy, et al., 2010).

Given the contribution of low-intensity CBT to improve access, alongside an emerging evidence base for the treatment of depression and anxiety (Coull & Morris, 2011; Cuijpers, Donker, van Straten, Li & Andersson, 2010; Farrand & Woodford, 2013) the approach presents a potential solution to improve access to currently underserved patient groups. Development of a low-intensity CBT approach for the treatment of depression in people with dementia is currently being piloted within the PROMOTE study, a one-arm feasibility

trial (Farrand et al., 2016). The clinical protocol for the PROMOTE self-help programme is presented in this paper and may hopefully serve to stimulate further research within a New Zealand context.

Introduction

The PROMOTE self-help programme, named *'Getting More Out of Every Day with Memory Difficulties: A Guide for People Living with Memory Difficulties'* (Farrand, Woodford, Anderson, & Lovis, 2015), is designed for the treatment of at least mild depression in community dwelling adults aged 18 and over experiencing any type of dementia of mild-to-moderate severity (e.g. score between 12-24 on the mini-mental state examination; Folstein, Folstein, & McHugh, 1975). Patients may, or may not, have the capacity to consent for treatment. An assessment of capacity to consent should be conducted with all people with dementia, whilst providing support to maximise their ability to provide consent (Warner, McCarney, Griffin, Hill, & Fisher, 2008). If the person with dementia does not have capacity to consent, consultee consent can be obtained from an informal caregiver (Hope, Slowther, & Eccles, 2009). Exact procedures for determining consent may differ between healthcare services and countries, and as such local policy concerning consent should be adhered to. The PROMOTE self-help programme is not suitable for people with dementia who have a diagnosis of a severe and enduring mental health difficulty (for example, psychosis), activity suicidal, have a history of persistent self-harm or currently misusing alcohol, prescription drugs or other substances to an extent that use severely interferes with everyday activity.

The programme is based on a simple model (Ekers et al., 2014) of behavioural activation (BA; Richards, 2010), a psychological approach targeting behavioural avoidance, common in depression, by increasing engagement in activity (Farrand et al., 2014). Further, the programme is designed to be supported by an informal caregiver of the person with dementia to enable them to utilise the programme within their own home. To help provide support, the informal caregiver is supplied with their own workbook (*'Getting More Out*

of Every Day with Memory Difficulties: A Guide for Family and Friends'; Farrand, Woodford, & Anderson, 2015). In addition, the informal caregiver receives training in the use of the programme, alongside weekly telephone guidance provided by a psychological practitioner or other trained mental health professional.

Several features of a simple BA protocol suggest it may have potential utility for people with dementia and their caregivers (Farrand et al., 2016). For example, the BA protocol adopted represents a simple model (Ekers et al., 2014) making it easier for people with dementia and caregivers to understand. This contrasts to the BA model commonly employed in high intensity CBT (Dimidjian, Barrera, Martell, Muñoz, & Lewinsohn, 2006) that often also includes cognitive components, potentially making it more difficult for people with cognitive impairment to understand. Further, as a simple psychological treatment, a recent definitive RCT has demonstrated psychological practitioners can be trained to deliver BA thereby making the approach both a clinically and cost-effective solution (Richards et al., 2016). In addition, participation in meaningful activity is essential to maintain wellbeing in people with dementia (Rolland & Chappell, 2015). However, decreased activity is common in dementia, impacting negatively on social inclusion, relationships, psychological wellbeing and results in an increased reliance on informal caregivers (Vikström, Josephsson, Stigsdotter-Neely, & Nygård, 2008). As such, research has suggested the importance of developing interventions that support engagement in meaningful activity, including supporting caregivers to enable the person with dementia to continue participation in meaningful activities (Roland & Chappell, 2015). A simple BA approach may therefore represent a solution. Indeed, initial evidence has demonstrated enlisting informal caregivers to support BA may be an acceptable and effective approach, reducing symptoms of depression in both people with dementia and informal caregivers themselves (Teri, 1994). The PROMOTE self-help intervention may therefore have the potential to improve

depression and quality of life in people with dementia, the primary intervention target, as well as reduce depression and burden in informal caregivers.

Treatment setting

People with dementia and informal caregivers experience a number of barriers to accessing face-to-face support, such as transportation difficulties, lack of time or living in a rural setting (Tremont et al., 2015). Furthermore, people with dementia often experience uncertainty in unfamiliar environments causing anxiety and agitation (Kings Fund, 2013). Therefore, as far as possible and when requested, face-to-face sessions are delivered within the home of the person with dementia or a familiar community setting. To overcome access difficulties, telephone delivery may be considered. However, the person with dementia and informal caregiver will need a speaker phone to allow for each person in attendance to participate.

The low intensity CBT programme: PROMOTE

The programme consists of two separate workbooks (available on request from the authors). One workbook (Farrand et al., 2015a) is specifically designed for the person with dementia to work through the simple BA model (Ekers et al., 2014; Richards, 2010), providing information on the steps of BA and supplementary worksheets to aid completion of the steps within the home. The second workbook (Farrand et al., 2015b) is provided to the informal caregiver to facilitate supporting the person with dementia work through the BA approach within their own home. The workbook for informal caregivers provides information regarding depression and dementia and supports the caregiver through the steps of the simple BA approach and relapse prevention. Further, advice concerning the management of common setbacks when using BA is provided, alongside tips for the caregiver themselves to manage their own difficulties and access sources of support within the community.

The development of both workbooks were closely informed by qualitative research with people with dementia and caregivers (Farrand et al., 2016) and written in a manner consistent with

guidance informing the development of dementia friendly material (DEEP, 2013). Vignettes, written in a way to integrate common factors essential to the therapeutic relationship (Cahill et al., 2008) and associated with improved therapy outcome (Wampold, 2015), were also incorporated into the workbooks. For example, vignettes were written to generate a belief in recovery and the helpfulness of the techniques, alongside the provision of guidance, feedback, empathy and warmth (Richardson & Richards, 2006; Richardson, Richards, & Barkham, 2010).

During workbook development, it was identified that the use of standard mental health related terminology was considered unacceptable by both people with dementia and informal caregivers (Farrand et al., 2016). In particular, there was limited acceptability for terms such as 'depression', 'low mood', 'psychological' and 'dementia'. Evidence indicates varied willingness towards adopting diagnostic labels (Clare, Quinn, Jones, & Woods, 2016), potentially being dependent on the awareness and acceptance of a dementia diagnosis being a gradual process (Lishman, Cheston, & Smithson, 2016). 'Memory difficulties' was therefore adopted, however use of the term dementia may be appropriate with patients dependent on stage of diagnosis acceptance. Following guidance concerning improving wellbeing in people with dementia (Department of Health, 2012), workbooks were written adopting positive language with a focus on 'wellbeing' and 'learning to living well with dementia'. Furthermore, informal caregivers rarely identify with the term 'carer' (Cameron, Aggar, Robinson, & Kurrie, 2011), reporting the term negatively impacts upon and threatens the identity of the person they care for (Knowles et al., 2016). As such, 'family member or friends' was adopted as an alternative (Molyneaux, Butchard, Simpson, & Murray, 2011).

Supporting and guiding the PROMOTE self-help programme

As the PROMOTE self-help programme is designed to be supported by the caregiver of the person with dementia within their own home, caregivers themselves also receive guidance in the delivery of the programme from

the psychological practitioner or other mental health professional trained in the competencies required to support CBT self-help (Roth & Pilling, 2008). An informal caregiver (defined as a family member or friend) with at least weekly contact with the person with dementia and willing to support the programme should be identified. Given that relationship difficulties between people with dementia and caregivers are associated with higher levels of carer burden and poorer family functioning (Steadman, Tremont, & Duncan Davis, 2007), it is important to work with the person with dementia and their caregiver to ascertain suitability to provide support.

The role of the caregiver is to attend face-to-face sessions with the person with dementia and support them use the programme within the home. Specific tasks may include supporting the person with dementia to: (a) complete homework worksheets; (b) carry out planned activities; (c) provide prompts and reminders to complete activities and (d) check planned activities have been completed. The level of support provided by the caregiver will depend on the person with dementia's needs and level of cognitive and functional impairment. To help resolve any difficulties or set-backs encountered when using the programme, caregivers also receive weekly telephone guidance from the psychological practitioner or other trained mental health professionals. This weekly telephone guidance can be classified as minimal contact support (Farrand & Woodford, 2013) and follows the 'Plan, Do, Review' model (Williams, 2014).

Informing support, guidance and overcoming setbacks

Due to the symptoms of dementia and associated complications of aging there may be a number of difficulties experienced by people with dementia when working through the PROMOTE self-help programme. These difficulties can be understood by adopting the COM-B behavioural change framework (Michie, van Stralen, & West, 2011), and recognise the difficulties people with dementia may experience arising from an interaction of 'Capability', 'Opportunity' and 'Motivation'. As such, a COM-B analysis may be used to gain

an awareness of difficulties experienced across these areas, helping inform the provision of support and guidance to help overcome difficulties that may be experienced using the programme. Such difficulties can include the following.

Behavioural and psychological symptoms of dementia (BPSD).

At some point during the progression of dementia, 90% of people living with dementia will experience BPSD (Cerejeira, Lagarto, & Mkaetova-Ladinska, 2012). Common symptoms include emotional changes (e.g. anhedonia; depression; anxiety; apathy; hypomania; irritability; aggression); delusions and abnormal thought content, perceptual disturbances or changes to motor function (e.g. motor retardation or motor hyperactivity, agitation, wandering, repetitive behaviours; social inappropriate behaviours), changes to sleep and extreme increases or decreases in eating. Increases in BPSD may indicate progression of dementia severity and inform decisions as to whether the person with dementia needs to be referred on for more appropriate support from dementia specific healthcare services.

Difficulty identifying activities

As people age, functional losses are experienced (Baltes, 1991; Baltes & Carstensen, 1996; Baltes & Smith, 2003) making identification of new, or adaptation of old activities to enable them to be achieved, a common difficulty. The psychological practitioner or other trained mental health professional should use the Selection Optimisation and Compensation (SOC) model (Baltes, 1991; 1997) if difficulties in this regard are experienced. The SOC model provides a theoretical framework informing an approach to working with older adults to help them achieve their goals despite these losses (Baltes, Staudinger, & Lindenberger, 1999). Research indicates some older adults with Alzheimer's Disease successfully utilise SOC adaptation strategies to maintain functioning (Rapp, Krampe, & Baltes, 2006) and the model has been used to develop interventions for people with dementia (Golden & Lawlor, 2006).

Specifically, the SOC model provides a framework to assist the person with dementia select new activities of importance and value to them, or

adapt the way in which they work to complete goals, using optimisation and compensation strategies. If an activity had to be given up due to limitations, the caregiver should help the person with dementia identify activities of importance and value to the person with dementia and consider other more achievable activities of similar value. Sometimes an activity may not need to be given up entirely in which cases the person with dementia will alternatively be supported to identify resources they may need to focus on to achieve the activity (optimisation) and consider other ways to achieve it taking into account current limitations (compensation) (Freund & Baltes, 1998).

Finally, if identification of activities remains difficult, the Pleasant Events Schedule for Alzheimer's disease (PES-AD; Teri & Lodgsdon, 1991) may be used to help inform selection. The PES-AD is a 53 item questionnaire designed to help identify pleasurable activities the person with dementia may be able to engage in. Once activities are identified the psychological practitioner or other trained mental health professional, or informal caregiver, will support the person with dementia plan these into the 'My Next Steps Diary' worksheet included within the programme workbooks.

Memory, communication and language difficulties

Memory (Burns & Iliffe, 2009), communication and language (Young, Lind, & Steenbrugge, 2016) difficulties are common to most dementia types and can threaten the competency (Michie et al., 2011) of the person with dementia to engage with the programme. Therefore, support and guidance provided by the psychological practitioner or other trained mental health professional and caregiver should be delivered in small chunks, as one-step instructions, with increased use of yes/no and choice questions (Eggenberger, Heimerl, & Bennett, 2013), at a slow pace and repeated or rephrased where necessary (Chand & Grossberg, 2013). Finally, people with dementia often find it easier to access older rather than new memories (Sagar, Cogen, Sullivan, Corkin, & Growdon, 1988). It can be helpful therefore to talk about old photographs, listen to music or watch familiar films

to help identify activities when planning to include them within the PROMOTE workbooks. People with dementia and caregivers may already use techniques such as a white board or electronic device to aid memory difficulties. Discussions concerning how to integrate any such techniques when working through the workbooks may therefore be beneficial.

Repeating questions

Repeating questions are common in people with dementia and can be frustrating for family members and friends. Caregivers should remain calm and answer the question as if it were the first time it had been asked or try and answer it in a different way, for example, writing the answer down or use other memory aides or cuing systems (Bourgeois, Bugio, Schulz, Beach, & Palmer, 1997). Sometimes repeating questions may also indicate the person with dementia is trying to communicate something else, therefore the caregiver may need to consider the emotion the person is trying to communicate.

Lack of motivation

Lack of motivation is a common symptom of both dementia and depression (Teng et al., 2008) and can negatively impact on engagement with the programme (Michie et al., 2011). Motivation in the person with dementia may therefore be increased by using the following strategies to enhance engagement: (1) picking times of the day associated with increased energy or motivation; (2) choosing activities of importance and value; (3) providing praise and encouragement to reinforce gains; (4) choosing a quieter place to work through the activities and (5) working on the programme little and often. Several of these are also common strategies adopted within the simple BA model (Richards, 2010) forming the basis of the PROMOTE self-help programme.

Relationship difficulties

Relationship difficulties between caregivers and people with dementia relating to problems with communication or language are common (Savundranayagam, Hummert, & Montgomery, 2005). Specific communication strategies may be helpful in reducing the impact of these (Eggenberger et al., 2013). However, if persistent it may be advisable to

consider involving other family members or friends better suited to support the programme.

Co/multi-morbid health complications

People with dementia or their informal caregivers may be experiencing other physical health difficulties that may result in barriers to working through the programme such as lack of energy; physical disabilities; transportation problems; medication regimes and managing multiple healthcare appointments. Any difficulties that may negatively impact on the opportunity (Michie et al., 2011) of the person with dementia or caregiver to engage with the programme should be identified during the assessment. A collaborative decision can then be reached to either utilise problem solving to overcome difficulties to facilitate continued engagement, or consider other types of support that may be more appropriate.

Treatment Protocol

Guidance structure

An overview of the guidance provided to the caregiver by the psychological practitioner or other trained mental health professional can be seen in Figure 1. A maximum of 12 guidance sessions (including the assessment) over a period of 3 months is provided. Given evidence that frequent sessions are more effective, weekly sessions should be offered (Cuijpers, Huibers, Ebert, Koole, & Andersson, 2013). However, establishing treatment frequency and total number of guidance sessions to provide should be informed by a patient centered discussion with the person with dementia and their caregiver surrounding potential adaptations to the structure of sessions.

Session one: Assessment

Aims

The psychological practitioner or other trained mental health professional will: (a) gain an understanding of the main difficulties the person with dementia is experiencing with their mood; (b) assess suitability for treatment; and (c) introduce the PROMOTE self-help programme if suitable.
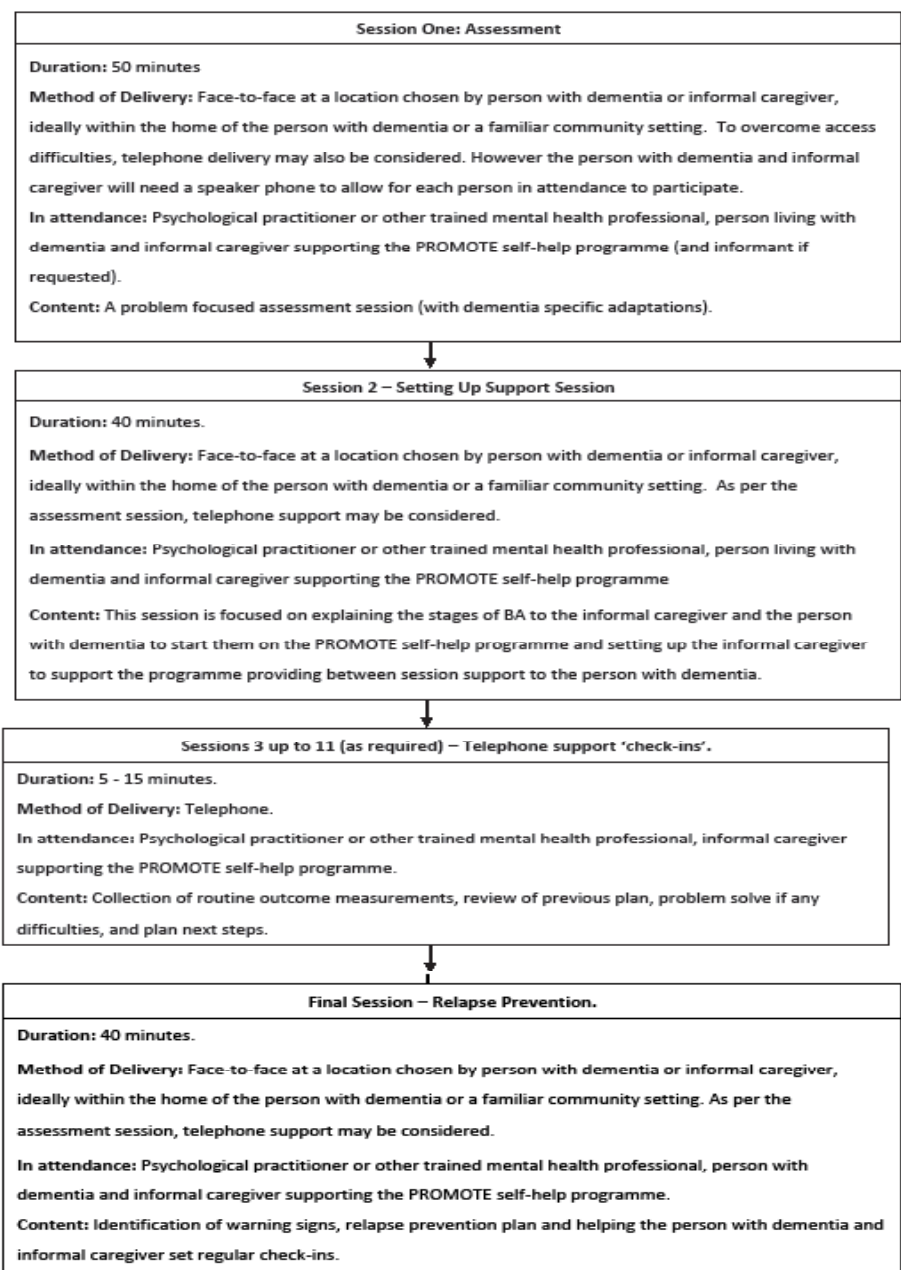
Introduction

At the start of the session the psychological practitioner or other trained mental health professional should introduce themselves, their role, state the purpose and duration of the session and check permission with the person experiencing dementia to involve the caregiver as informant and support the programme. It is also important any dementia symptom specific adjustments that may need to be made are also checked. If holding the assessment session within the home or community setting, attention should be given to ensure potential distractions are minimised.

Five Areas Assessment Model

Information gathering during the assessment is based on the Five Areas Assessment Model (Figure 2; Williams & Garland, 2002) which is jargon free (Williams, 2001) to maximise acceptability for patients and enhance suitability for use outside of clinical settings (Whitfield & Williams, 2003). Dependent on the person with dementia's need, the techniques described previously to overcome difficulties and setbacks to compensate for memory, communication and language difficulties, may be required alongside increased checking of understanding. However, if required, checking of understanding should be

Figure 1. Overall Structure of the PROMOTE self-help programme

Session One: Assessment

Duration: 50 minutes

Method of Delivery: Face-to-face at a location chosen by person with dementia or informal caregiver, ideally within the home of the person with dementia or a familiar community setting. To overcome access difficulties, telephone delivery may also be considered. However the person with dementia and informal caregiver will need a speaker phone to allow for each person in attendance to participate.

In attendance: Psychological practitioner or other trained mental health professional, person living with dementia and informal caregiver supporting the PROMOTE self-help programme (and informant if requested).

Content: A problem focused assessment session (with dementia specific adaptations).

Session 2 – Setting Up Support Session

Duration: 40 minutes.

Method of Delivery: Face-to-face at a location chosen by person with dementia or informal caregiver, ideally within the home of the person with dementia or a familiar community setting. As per the assessment session, telephone support may be considered.

In attendance: Psychological practitioner or other trained mental health professional, person living with dementia and informal caregiver supporting the PROMOTE self-help programme

Content: This session is focused on explaining the stages of BA to the informal caregiver and the person with dementia to start them on the PROMOTE self-help programme and setting up the informal caregiver to support the programme providing between session support to the person with dementia.

Sessions 3 up to 11 (as required) – Telephone support 'check-ins'.

Duration: 5 - 15 minutes.

Method of Delivery: Telephone.

In attendance: Psychological practitioner or other trained mental health professional, informal caregiver supporting the PROMOTE self-help programme.

Content: Collection of routine outcome measurements, review of previous plan, problem solve if any difficulties, and plan next steps.

Final Session – Relapse Prevention.

Duration: 40 minutes.

Method of Delivery: Face-to-face at a location chosen by person with dementia or informal caregiver, ideally within the home of the person with dementia or a familiar community setting. As per the assessment session, telephone support may be considered.

In attendance: Psychological practitioner or other trained mental health professional, person with dementia and informal caregiver supporting the PROMOTE self-help programme.

Content: Identification of warning signs, relapse prevention plan and helping the person with dementia and informal caregiver set regular check-ins.

employed with sensitivity and not in a way that appears like a direct test or challenge of knowledge.

The Five Areas Assessment model provides structure to the assessment of current difficulties being experienced (Wright, Williams, & Garland, 2002). Specifically, information should be gathered around: (a) Life situation, relationships and practical problems and difficulties being experienced alongside; (b) Altered thinking; (c) Altered feelings, moods or emotions; (d) Altered physical feelings and symptoms and (e) Altered behaviour. The impact of the difficulties and problems identified within key areas of life (e.g., home management, social and private leisure activities, work/ retirement and relationships) should also be explored.

Other information to inform treatment decisions should also be gathered, such as modifying and maintenance factors, medication, drug and alcohol use, current health, social and community support being received, management of the transition to life with dementia/memory difficulties, ability to successfully adapt life goals given diagnosis and previous experiences of treatment for mental health difficulties. Patient centeredness must be maintained throughout the assessment by ensuring the person with dementia is actively involved, with vigilance kept as to any unnecessary situations when the caregiver attempts to answer for the person with dementia. However, at times, the person with dementia may struggle with recall and caregiver involvement may be needed to reduce complexity of the questions or act as informant.

Outcome Measurements

To allow tracking of patient progress, taking routine outcome measurements of depression and anxiety at each session is advisable. A number of self-report depression and anxiety outcome measurements have been adopted for use with people with dementia such as the Geriatric Depression Scale-15 and 12R (Sheikh & Yesavage, 1986; Sutcliffe et al., 2000), the Anxiety in Cognitive Impairment and Dementia scale (Gerolimatos et al., 2015) and the Geriatric Anxiety Inventory (Pachana et al., 2007). Quality of Life may be measured by using a brief measure such as the EuroQol-5D-3L (EQ-5D-3L) (Brooks, 1996) which has been validated in a mild-to-moderate dementia population (Hounsome, Orrell, & Edwards, 2011). All outcome measurements suggested have been developed to minimise difficulties with memory and cognition that may be encountered when using commonly adopted outcome measures developed for an adult population (Frank, Lenderking, Howard, & Cantillon, 2011).

Information giving

At the end of the assessment, information consistent with the 'probable' diagnosis reached, should be provided with consideration given to stigma attached to late life depression (Hall & Reynolds-Iii, 2014). If considered suitable for the programme, both the person with dementia and caregiver should also be given the workbooks and introduced to the Five Areas Assessment Model (Williams & Garland, 2002) alongside the *'My Wellbeing Cycle Worksheet'* within the workbooks. To help personalise the discussion when explaining the CBT rationale, relevant examples identified during assessment should be used to complete the *'My Wellbeing Cycle Worksheet'*. Further, a simple rationale for BA is provided in lay language, explaining the impact of both dementia and depression on withdrawal from meaningful activity and the importance of reengagement with meaningful activity to improve mood. The rationale for BA provided in the workbooks is used to support the explanation for the person with dementia and caregiver.

Figure 2. A Five Areas assessment example, adapted from Williams & Garland (2002)
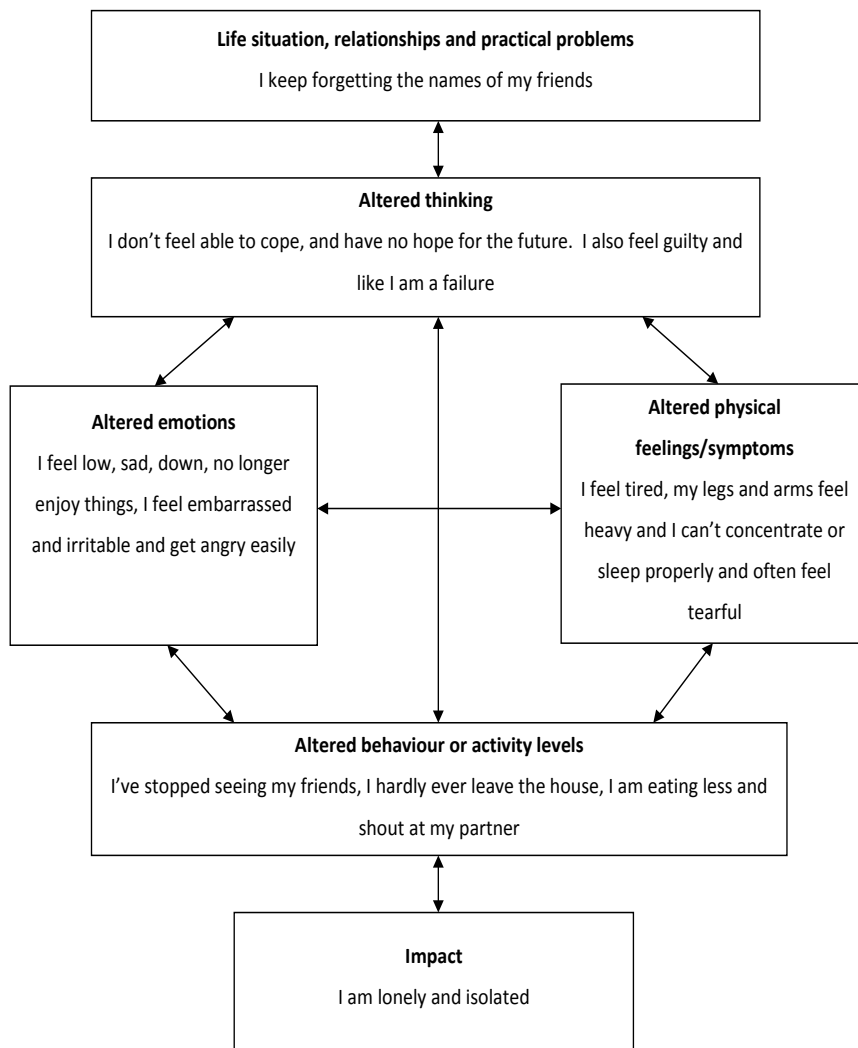
Homework

To support psycho-education, ask the person with dementia and caregiver to read the first section of their workbooks explaining depression and the rationale for BA. Additionally, they will work together to set up to four goals for treatment that are: (a) specific, detailed and clear; (b) positive, focusing on striving to achieve something and (c) realistically achievable over the treatment period, using the *'My Goals for the Workbook'* worksheet. Finally, supported by the caregiver, the person with dementia should be tasked to keep a baseline diary of their activities over the following week using *'My Starting Point Diary'* worksheet. As much detail should be noted as possible, including: (a) what the activity is; (b) where the activity took place; (c) who the activity was with and (d) how the activity made the person with dementia feel.

Session two: Setting up support session

Aims

The psychological practitioner or other trained mental health professional will: (a) follow-up information gathered in the assessment session; (b) review completion of the *'My Starting Point Diary'* worksheet to identify the type and amount of activity the person with dementia is currently engaged in; (c) explain to the person with dementia and caregiver the three stages of BA and (d) equip the caregiver with a good understanding of the stages of BA to allow ongoing support within the home.

Introduction

The psychological practitioner or other trained mental health professional will reintroduce themselves, their role alongside the purpose and duration of the session. Consistent with the assessment session, consent for caregiver involvement should be re-checked, necessary symptom specific adjustments made and the coexistence of depression and dementia is normalised.

Information gathering

Routine outcome measurements of depression and anxiety should be taken by the psychological practitioner or other trained mental health professional, with results clearly fed back to the person with dementia and caregiver, explaining any change in scores from the assessment session. As subsequent outcome measures will be collected by the caregiver, it is important the way in which these will be used in the telephone check-ins is clearly explained and understanding checked. A clear enquiry should be undertaken regarding progress with homework set in the assessment session, alongside a review of the person with dementia and caregiver's understanding of the Five Areas Assessment Model and rationale for BA.

Information giving

As the caregiver requires at least a basic understanding of the BA steps in order to support the person with dementia work through the programme, information giving should be focused on explaining the three stages of BA.

A Simple Behavioural Activation Model

The PROMOTE self-help programme is based on a simple (Ekers et al., 2014) BA model (Richards, 2010) commonly delivered within the IAPT programme as a supported self-help intervention (Farrand et al., 2014). BA is informed by behavioural theory and can be used as a stand-alone treatment for depression (Jacobson, Martell, & Dimidjian, 2001; Lejuez, Hopko, LePage, & Hopko, 2001). Although a number of approaches for the delivery of BA exist (see Hopko, Lejuez, Ruggiero, & Eifert, 2003) the underlying aim is to target behavioural avoidance by gradually reintroducing activity thereby improving engagement with positively reinforcing activities whilst overcoming sources of negative reinforcement (Hopko et al., 2003). Within the simple BA model a structured and graded approach is adopted to increase activity to target the behavioural avoidance often accompanying depression (Richards, 2010).

The simple BA model encompasses three main steps:

Step One: Identifying activities

Activity can be categorised into three main types: (a) routine; (b) pleasurable; and (c) necessary. Routine activities are ones commonly performed many times in a week, providing people's lives with structure, such as cooking, cleaning the house or doing the food shop. Pleasurable activities can be highly unique to people, but are those providing a sense of enjoyment and commonly include things such as seeing friends, watching a film or engaging in a hobby. Last, necessary activities are those that may have a serious consequence if not done, such as paying a bill, taking medication or going to work. Initially, the completed *'My Starting Point Diary'* worksheet should be reviewed with the person with dementia and caregiver to help categorise the recorded activities into these three types using the *'Identifying Activities'* worksheet in the workbooks. Additionally, the extent to which each type of activity is represented in the baseline diary, alongside a consideration as to how much overall activity has been undertaken, should be considered.

Next, with support from the caregiver, the person with dementia will should use the *'Identifying Activities'* worksheet to initially identify at least one activity in each category they have stopped doing and would like to engage in again. When identifying one of each type of activity, the person with dementia and carer should be encouraged to consider 'valued' activities (Lejuez, Hopko, Acierno, Daughters, & Pagoto, 2011) related to important areas of life. These may include relationships, health, religious or spiritual life, finances, roles and responsibilities and social and leisure activities. At this stage, unless the caregiver has taken away all responsibility for completing necessary activities from the person with dementia, consideration should be made of any necessary activities the person with dementia may have stopped doing. Where there are consequences if not completed, support should be given to the person with dementia and caregiver to consider ways these activities could be achieved. If the caregiver has removed all responsibility for necessary activities from the person with dementia the possibility that this has been done prematurely, rather than because the person with dementia can no longer manage their completion, should be explored. Once an activity in each category has been identified, the person with dementia and caregiver should be encouraged to continue working on the *'Identifying Activities'* worksheet as

homework.

Step two: Organising activities

Next, the 'Organising Activities' worksheet in the PROMOTE self-help programme will be used to support the person with dementia consider the level of difficulty associated with completing each activity: (a) less difficult to do now; (b) difficult to do now; and (c) more difficult to do now. Categorisation of activities into difficulty level is important as BA should support a gradual reintroduction to engagement in activity. Therefore, easier activities to achieve should be planned to begin with, moving to more difficult activities later. Again, this exercise should be continued as a homework task.

Step three: Planning activities

The person with dementia and caregiver should be supported to start planning activities to compete using the *'My Next Steps Diary'* worksheet in the workbook. Ideally, activities that are easier to achieve, alongside a mix of pleasurable, routine and necessary, will be identified. As per the *'My Starting Point Diary'* worksheet, as much information about the planned activities as possible should be recorded. When activities have been planned the psychological practitioner or other trained mental health professional will identify and help problem solve any barriers that may get in the way of their completion.

Session Ending

The session should be summarised with understanding regarding homework set checked and the carer directed to useful pages to read in their version of the workbook, such as regarding the steps of BA and overcoming common setbacks. Importantly, caregiver understanding of the steps of BA should be checked as they will be responsible for supporting the person with dementia use the techniques at home. Finally, the first telephone check-in should be scheduled with the caregiver, and paper copies of the routine outcome measurements provided to administer to the person with dementia before subsequent check-ins.

Homework

The person with dementia should complete the three steps of the BA protocol as homework. Furthermore,

they will continue to complete the *'My Next Steps Diary'* making a note of how each activity made them feel and general comments recorded.

Session 3 up to 11 as required: Telephone guided 'check-ins'

Aims

The psychological practitioner or other trained mental health professional will work with the caregiver supporting the PROMOTE self-help programme to: (a) review routine outcomes measurements taken with the person with dementia; (b) review plans and homework set the previous week; (c) if required, help the caregiver problem solve any difficulties experienced; and (d) set a plan in the use of programme for the following week.

Introduction

A standard introduction is given, the psychological practitioner or other trained mental health professional will reintroduce themselves and their role, checking the caregiver's name, describing the agenda and setting a time scale (5-15 minutes).

Information gathering

Results of the routine outcome measurements should be gathered over the telephone from the caregiver. An overview of the last week's plan will be conducted, explicitly exploring any difficulties experienced in supporting the programme with any difficulties followed up with a problem focused review.

Problem Focused Review

The problem focused review of difficulties experienced in the use of PROMOTE self-help programme has been informed by the Plan, Do, Review Model (Williams, 2014). Specifically, the review should consist of: (a) normalising the problem; (b) providing empathy; (c) directing the caregiver to advice in the workbook to help overcome any difficulties experienced; and (d) encouragement to support continued engagement.

Session ending

Understanding and attitude concerning the plan set with the caregiver should be checked and the subsequent telephone check-in arranged.

Final session: Relapse prevention

Aims

The psychological practitioner or other trained mental health professional will: (a) establish an appropriate ending; (b) guide completion of a *'Staying Well'* plan included within the workbook to help the person with dementia and caregiver identify warning signs depression may be returning; and (c) encourage continued engagement with the *'Staying Well'* plan following the end of support and stress actions to take if signs are identified.

Standard session components

As with other sessions, the psychological practitioner or other trained mental health professional should provide a standard introduction, overview benefits of continued engagement with the *'Staying Well'* plan included within the workbook, collect end of treatment outcome measurements and identify any concerns about the end of support.

Relapse prevention steps.

The person with dementia should initially be helped by the psychological practitioner or other trained mental health professional to identify their warning signs for depression. Symptoms identified in the Five Areas Assessment (Williams & Garland, 2002) at the beginning of the workbook and recorded using the 'My Warning Signs' worksheet should be used to support this exercise. Activities, skills and techniques learnt during the course of treatment as helpful in reducing depression should then be recorded using the 'Staying Well Toolkit' worksheet. Finally, the person with dementia and caregiver will be encouraged to continue to 'check in' with the 'My Warning Signs' worksheet following the end of the support sessions to consider the person with dementia's level of activity and any symptoms of depression experienced. The person with dementia and their caregiver should be encouraged to use the PROMOTE self-help programme to inform an action plan to re-engage in activities previously found helpful should symptoms of depression return in the future.

Considering demands placed on the informal caregiver providing support

Whilst the role of the caregiver in the programme is to provide support to the person with dementia, the psychological practitioner or other trained mental health professional should be aware of the impact of supporting the PROMOTE programme on wellbeing of the caregiver. In particular, two main demands may be placed on caregivers providing support.

Caregiver burden

Caregiver burden is a common difficulty (Svendsboe et al., 2016) and refers to the emotional difficulties and physical consequences of providing care. Informal caregivers may experience lack of time, poor support, their own physical health difficulties, competing demands and reduced energy. As such, if support for the programme is identified as causing difficulties to the caregiver these difficulties should be explored with help provided to problem solve these. Where appropriate, this should involve a collaborative discussion regarding the appropriateness of the caregiver continuing to support the programme alongside signposting to other sources of available support, for example individual psychological support or community carer support groups.

Caregiver anxiety/worry

Understandably caregivers are likely to be protective of the person with dementia. However, at times this can manifest as worry that it may be dangerous for the person with dementia to engage in an activity identified on their *'My Next Steps Diary'* or they will be unable to achieve an activity. If anxieties are identified, the psychological practitioner or other trained mental health professional should normalise and reinforce the rationale for BA and emphasise the importance of the person with dementia continuing to work through the programme to increase activity. Depending on the impact of anxiety on the caregiver encouraging them to consider seeking psychological support themselves may be required. However, the psychological practitioner or other trained mental health professional providing guidance should be aware that caregivers experience a number of barriers to seeking support

for themselves including stigma, lack of support services and negative attitudes towards treatment (WHO, 2015).

Discussion

This clinical protocol describes the PROMOTE CBT self-help programme based on a simple BA model for people living with dementia and depression supported within the home by caregivers who themselves receive guidance by a psychological practitioner or other trained mental health professional. The approach has the potential to be an acceptable and effective treatment to help improve the emotional wellbeing of the increasing population of people living in New Zealand with dementia (Alzheimer's New Zealand, 2012) and meet objectives to improve the wellbeing of people with dementia living in the community (Ministry of Health, 2013). As a guided self-help programme, PROMOTE represents greater flexibility concerning the provision of support and may offer a way of delivering the New Zealand Ministry of Health agenda to provide care closer to home (Ministry of Health, 2014). Currently, a one-armed trial of the intervention is underway (Farrand et al., 2016) examining the feasibility and acceptability of the approach within England. Informed by the MRC Complex Interventions Framework (Craig et al., 2008), if progression criteria are met, research will go on to examine the effectiveness of the intervention in a Phase III definitive randomised controlled trial. Further research could be undertaken to make appropriate adaptations for the New Zealand population, including culturally appropriate adaptations for Māori and other ethnicities (Ministry of Health, 2013).

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Self-practice/self-reflection (SP/SR) as a training strategy to enhance therapeutic empathy in low intensity CBT practitioners

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Low intensity CBT interventions are starting to be introduced into national healthcare systems (e.g. UK, Australia) to facilitate population-wide access to evidence-based psychological interventions. Good practitioner interpersonal skills are important to enhance the effectiveness of low intensity interventions. Self-Practice/Self-reflection (SP/SR) is an experiential training strategy with an evidence base that suggests its value in enhancing interpersonal skills. This study examines the impact of SP/SR on therapeutic empathy in a group of experienced low intensity practitioners in England. The results suggest a primary impact of SP/SR on practitioners' empathic stance/attitude. Other aspects of empathy (empathic attunement, empathic communication) are potentially responsive to SP/SR, but may require skilled reflective questioning and deliberate practice to translate attitude/stance to empathic attunement and communication skills.

Introduction

Low intensity interventions have been developed as a population-wide strategy to increase access to evidence-based psychological therapies, using the minimum level of intervention necessary to create the maximum gain (Bennett-Levy et al., 2010; NICE 2004a, 2004b). Typical examples of low intensity interventions in the UK include guided self-help using written psychoeducational materials or cCBT (computerised CBT), and psychoeducation groups (Bennett-Levy et al., 2010).

Low intensity interventions were first introduced into the national health service in England as part of a stepped care system of interventions for common mental health problems. In Australia, a Federal government initiative to introduce low intensity interventions has taken a different form, with a prime focus on internet-based interventions (Titov et al., 2015). New Zealand already has some examples of locally-developed low intensity interventions (e.g. Fleming, Dixon, Frampton & Merry, 2012), but to date has not developed low intensity services on a national scale.

A particular target of low intensity interventions in England has been to increase access to disadvantaged groups, including ethnic minorities (Leibowitz, 2010). In Australia, the Federal Government initiative has specifically sought to increase e-mental health access to the Aboriginal and Torres Strait Islander first nation Australians (Department of Health and Ageing, 2012). Approximately 6% of New Zealanders experience psychological distress at any given time with higher rates for Maori (10%) and Pacific (9%) adults (Mental Health Foundation, 2014). Accordingly the relevance of low intensity interventions to increasing access to psychological therapies amongst the New Zealand population, including Maori and Pacific peoples, is quite apparent.

In England, Psychological Wellbeing Practitioners (PWPs) (previously known as low intensity practitioners) have been trained to support guided self-help interventions and provide brief CBT interventions within a stepped care system (e.g. NICE, 2004a). The training for PWPs is relatively brief at 45 days (20 of which are university-directed study days) and it emphasises the acquisition of the specific skill set required to assess clients and deliver low intensity CBT-based interventions (Richards, Farrand & Chellingsworth, 2011). The majority of individuals training as PWPs do not have any previous experience of delivering psychological interventions or possess a core clinical qualification, but most will have worked in the field of mental health or in a related social care role (Farrand, Rayson & Lovis, 2016).

Although the manualised nature of low intensity interventions might lead to the assumption that the technical content of the interventions is the only factor of importance, Chaddock (2013) has suggested that practitioners' interpersonal skills are central to their effective implementation:

> It is precisely because you will have limited contact with the client that interpersonal factors are so important. As a LICBT [*low intensity practitioner*] you have less time to elicit the information needed to understand the client's difficulty, to develop rapport and facilitate their initial engagement with the intervention materials, and to overcome any difficulties that arise. (Chaddock, 2013, p.70)

Although this argument has face validity, until recently there has been a lack of evidence on the role of the therapeutic relationship in general, or therapeutic empathy in particular, in low intensity working. However, a recent study has identified that 9% of variance in outcomes for clients receiving low intensity interventions was due to therapist effects, with a group of PWPs identified that had far higher recovery rates, and also far lower rates

of deterioration (Green, Barkham, Kellett & Saxon, 2014). Although the authors noted a range of factors that appeared to contribute to the success of these 'super coaches', general communication and interpersonal skills were identified as key, both by the PWPs but also by their supervisors. In addition, a further factor identified was the ability of the PWPs to "adapt interventions to fit individual patient needs, whilst not drifting away from treatment protocols" (Green et al., 2014, p.50).

Clearly further research is required to understand the microskills that highly successful PWPs possess, but it is likely to be consistent with research in other groups of therapists where relational skills (Jennings & Skovholt, 1999) and the ability to build therapeutic alliances (Luborsky, McLellan, Woody, O'Brien & Auerbach, 1985) have been found to be related to effective practice. Green et al. (2014, p51) concluded that "what self-help intervention patients receive is important, but also the skill with which it is delivered is vital in creating outcomes (i.e. the intervention is not a purely technical concern)", a finding that contradicts any assumption that the technical content of the low intensity interventions is the only relevant variable.

Given the above, there is a clear challenge for PWP training courses which take entrants likely to have vastly differing levels of mental health experience, psychological therapy experience, and interpersonal knowledge and skills (Farrand et al. 2016). How can a course ensure that all PWPs have the knowledge and therapeutic empathy skills needed to build trusting, warm and effective therapeutic relationships by the end of 45 days? Where do PWPs learn the empathic skills required to engage the harder-to-engage or sceptical client, never mind address the inevitable therapeutic ruptures that will occur whether due to client beliefs (*"I can't trust strangers"*), therapist beliefs (*"I am completely responsible for whether this client recovers"*) or some interaction between the two? Where does the PWP learn to step back from therapeutic ruptures and examine their own thoughts and feelings before they are hooked into acting upon them? How does the PWP learn to attune to the subtle indications of what might be going on for individual clients, and

take empathic action to address this and reduce the chances of disengagement? It is likely that some of the most effective PWPs may already have high levels of interpersonal skills when they embark on their training. Alternatively, perhaps there are those who respond well to their core PWP training and then further develop their interpersonal skills through supervision and reflection upon clinical experience (Haarhoff & Thwaites, 2016). We currently do not have the evidence to confirm either possibility. Clearly the priority has to be to find a way (or more likely a range of ways) to help all PWPs develop these skills in order to improve the client experience and clinical outcomes.

Although there are specific differences between low intensity CBT and high intensity CBT, this might be an area where (in the absence of LI CBT-specific models and evidence) we can extrapolate from high intensity CBT and other psychological therapies. Empathy has previously been identified as one of the key factors in psychotherapeutic change (Bohart & Greenberg, 1997) and studies have suggested that between 7 and 10% of the variance in therapy outcomes are accounted for by empathy (Bohart, Elliott, Greenberg & Watson, 2002). Amongst CBT therapists, empathy is acknowledged to play a key role in therapy outcomes (Beck, Rush, Shaw and Emery, 1979; Burns & Nolen-Hoeksema, 1992), and a CBT model of empathy has been developed that delineates four key elements of therapeutic empathy (Thwaites & Bennett-Levy, 2007):

• Empathic attitude or stance towards specific client or clients in general

• Empathic attunement (therapist awareness of the moment-to-moment experience of the client)

• Empathic communication skills (direct communications to the client)

• Empathy knowledge (factual declarative information about therapeutic empathy)

The delineation of these four elements makes it easier to identify aspects of empathy that may or may not be present in practitioners, and thus lead to an increased ability to identify training needs and targeted methods most likely to achieve the desired outcomes

(Bennett-Levy & Thwaites, 2007). For example, if a practitioner does not possess relevant declarative knowledge about empathy (e.g. knowledge of the role of empathy in engaging clients in behavioural experiments) then reading a book or paper may be one way to address this (Bennett-Levy, McManus, Westling & Fennell, 2009), but the same method is unlikely to be appropriate in order to learn procedural skills whether involving attunement to the client or the ability to communicate empathically (Bennett-Levy et al., 2009).

PWP training courses currently utilise a range of learning methods to help enhance practical skills including demonstration, role plays and assessed visual recordings. One specific solution developed for PWP training to maintain or enhance therapeutic empathy has been to use 'empathy dots' in assessment schedules to remind trainee PWPs to use empathy skills, and not neglect them whilst they are developing new PWP-specific skills. Richards and Lovell (2010) have described empathy dots as:

> … marks which a high-volume mental health worker puts into the margin of a pre-printed or hand written psychotherapy interview schedule that is about to be followed during an appointment - seeing the dots reminds the worker to say something warmly empathic and/or understanding at intervals within the interview. (Richards and Lovell, 2010)

Although a reminder not to forget basic interpersonal processes whilst implementing new technical skills is likely to be a very useful prompt, trainers have started to think about additional ways to develop and embed the interpersonal skills of both trainee PWPs (Farrand et al., 2016) and experienced PWPs (Thwaites et al. 2015). One of those ways is a method of training CBT therapists called Self-Practice/Self-Reflection (SP/SR) that has already been trialled in New Zealand (Fraser & Wilson, 2011; Haarhoff, Gibson & Flett, 2010; Spafford & Haarhoff, 2016). SP/SR places particular emphasis on understanding CBT 'from the inside out' – by participants experiencing CBT interventions for themselves and then reflecting on this and applying their learning within their clinical practice

(Thwaites et al., 2014).

There is a growing evidence base for the effectiveness of SP/SR in improving skills in trainee CBT therapists (Chaddock, Thwaites, Bennett-Levy & Freeston, 2014), newly qualified CBT therapists (Haarhoff, Gibson & Flett, 2011), experienced CBT therapists (Davis, et al., 2015), trainee clinical psychologists (Bennett-Levy et al., 2001) and practising clinical psychologists (Bennett-Levy, Lee, Travers, Pohlman & Hamernik, 2003). There is also a suggestion that self-practice might be perceived as an effective training strategy for Indigenous Australian counsellors (Bennett-Levy, et al., 2015a), which may have relevance for the training of Maori counsellors. Of particular note is the fact that the primary impact of SP/SR is on the interpersonal aspects of therapy (Thwaites et al., 2014). By having an experience of being in the client's shoes, therapists report that they have a greater attunement to clients, and greater understanding of the client experience and potential difficulties within therapy (Bennett-Levy et al., 2015b). A recent meta-synthesis of SP/SR research to date concluded that "self-practice/self-reflection can be particularly helpful for increasing empathy for clients, highlighting the difficulties they may encounter" (Gale & Schroder, 2014, p.373).

SP/SR aims to move from personal experiences to new professional learning via a structured process of reflection (Bennett-Levy et al., 2015b). For PWPs (and therapists in general), SP/SR is likely to provide a new and different experience of learning. The aim is to move from observation to reflection, bridging between personal experience and professional knowledge and skills.

Aim of the study

A previous paper had detailed the impact of SP/SR on the CBT-specific skills of experienced PWPs and the artistry with which they implement interventions (Thwaites et al., 2015). Within the PWP reflections, it was also noted that there were frequent mentions of SP/SR impacts on empathy, which suggested that a retrospective analysis could provide initial data around the differential impacts of SP/SR on therapeutic empathy. For the current

paper, these data have been re-analysed to describe the impact of SP/SR on the therapeutic empathy in the same group of PWPs.

As indicated above, Thwaites & Bennett-Levy (2007) and Bennett-Levy & Thwaites (2007) have previously suggested that therapeutic empathy can be conceived as comprising of four elements: declarative knowledge about empathy, empathic attitude/stance, empathic attunement, and empathic communication. Accordingly, the aim of the present study was to carry out a retrospective analysis to review all practitioners' reflections about empathy to see if SP/SR might have a differential impact on different elements of empathy.

METHOD

Participants

Thirty nine (36 female, 3 male) qualified PWPs within a large English psychological therapy service received one day's training on the role of reflection in low intensity psychological therapy. In line with identified best practice for SP/SR (Bennett-Levy, et al., 2015b), they were then given relevant information on SP/SR (e.g. time commitments, confidentiality) and invited to attend a meeting to find out more if they were interested in participating in the SP/SR programme.

Participation in SP/SR was voluntary and following this process a group of seven PWPs (all female) chose to take part in the programme. The practitioners who chose not to take part cited time or ongoing life events as the main reason for not taking part (Haarhoff, et al., 2015). Two participants failed to complete the programme due to life events. The seven participants had a mean post-PWP qualification experience of 2.57 years.

Procedure

The study followed the procedural recommendations for best practice in SP/SR implementation (Bennett-Levy et al., 2015b) including a pre-programme meeting at which the group made key decisions around the programme implementation, two face-to-face group meetings of 90 minutes each (at Module 4 and Module 9) and the development of personalised Personal Safeguard

Strategies (to be used in the event that SP/SR raised unexpected distress which required support – see Bennett-Levy et al., 2015b).

All participants were trained to access an online message board. The participants discussed boundaries and confidentiality, and unanimously voted to use their real names rather than anonymous names. Participants chose to complete each module over two weeks rather than one to allow sufficient time to practice (one module was stretched to three weeks). They were encouraged to read the module and implement the SP during the first week of the module. Initial postings to a message board were to be made by the end of the first week. The second week of each module was dedicated to posting enquiries and comments on other reflections and sharing learning and application to clinical practice.

Materials: SP/SR Workbook

The workbook content is described in detail elsewhere (Thwaites et al., 2015) and has now been published (Bennett-Levy et al., 2015b). Some of the SP activities mapped directly onto interventions that PWPs would utilise in their day-to-day clinical work with clients (e.g. developing problem statements, behavioural activation) whereas some were not within the LI remit and were clearly identified as personal development activities (e.g. using imagery to identify and strengthen 'New Ways of Being').

Measures

Participants were not specifically asked to include impacts on therapeutic empathy within their reflections. However previous studies (Bennett-Levy et al., 2015b) and our previous experience of delivering SP/SR suggested that reports of enhanced empathy were common. One year after completion of the programme, a researcher group of three participants and two facilitators re-analysed all of the reflections recorded in the online message board in order to identify text which clearly represented each of the four elements of the Therapeutic Empathy model for CBT (Thwaites & Bennett-Levy, 2007).

All examples of empathy were noted and categorised by the researchers

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into one or more of the four elements. Where there was agreement between the researchers about the categorisation, the data were listed under their respective element. In cases where the researcher group disagreed about the categorisation, these examples were discussed; agreement about categorisation was either reached between the researchers, or the item was discarded from the analysis as ambiguous.

Examples of the four elements are:

Empathic stance/attitude: Examples of a change in empathic attitude or stance are participant reflections that demonstrated a shift in attitude towards clients in general, or towards specific subgroups of client (e.g. *"I struggle not to feel annoyed with the type of client who repeatedly turns up at sessions and hasn't done their homework or made any changes"*).

Empathic attunement: Examples of empathic attunement would include reflections where practitioners have noted that they have made *"an active ongoing effort to stay attuned on a moment-to-moment basis with the client's communications and unfolding process"* (Bohart et al. (2002, p. 90).

Empathic communications: Examples of empathic communications would include reflections which demonstrate that there has been a change in the way that empathy has been directly communicated to the client: for example verbally in terms of content, or non-verbally through facial expression, tone of voice or behaviour (Thwaites & Bennett-Levy, 2007).

Empathy knowledge: Empathy knowledge is declarative knowledge about therapeutic empathy. Typically empathic knowledge is most commonly is learned through reading literature or didactic information in workshops (e.g. knowledge about the importance of empathy to client outcomes). Examples of changes in empathy knowledge might be reflections that indicate new understandings about the role of empathy in helping clients to change.

Participants also rated themselves weekly on a number of standard items taken from the Cognitive Therapist Empathy Scale (Thwaites, Bennett-Levy, Freeston, Armstrong & Cromarty, 2003). They were also encouraged to choose

a small number of individual items from the scale that were in line with their development needs. Examples of these ratings are reported in the Results section.

RESULTS

Overall finding

Self-reported changes in the interpersonal domain, and in particular empathy, were noted in each of the modules. Based on the number and quality of reflections within each category, there appeared to be a differential impact of SP/SR, with greater impact on some domains of empathy than others. The primary impact of SP/SR appeared to be on empathic stance/attitude.

Results for each of the four elements of therapeutic empathy are reported below. Participant self-ratings are also used to illustrate changes that appeared to be brought about by SP/SR.

Empathic stance/attitude

There were many examples of shifts in empathic stance/attitude throughout the modules. For instance, one participant noted that *'I guess this helped me to appreciate that people can find it hard to set specific and suitable time aside to do homework tasks.'* This quote shows how the completion of the module allowed the PWP to recognise that some clients may face a specific difficulty finding time during the therapeutic process. Another participant noted that *'[this] definitely made me empathise with those clients who struggle with thought recording – I was reluctant*

to write mine too!!' What is lacking in both these examples is evidence of translation from change in stance/attitude to change in therapist behaviour (enhanced attunement or communication skills).

There were many more examples of a shift in empathic attitude or stance, but with limited comment on how that might inform work with future clients, for example *'This definitely made me think about what some clients must feel when I casually ask them to tell me how much they believe a thought, or how strongly they experienced an emotion.'*

Some examples showed a stronger level of empathy and compassion emerging for clients:

'I struggled with starting this task which has given me insight into clients. I set a time to sit and do modules after a false start. When I did start it I already felt "behind". I thought of clients who say "I haven't done it" and found new level of empathy and also appreciation for admitting that'

and

'Reflecting back on the modules the biggest change for me is how I view the work I do with my most difficult clients, I have certainly became more compassionate towards them and have noticed a measured change in attitude – I know this is because I now understand how difficult the process is for a relatively well person (me) without stressful life circumstances, and without depression or anxiety!'
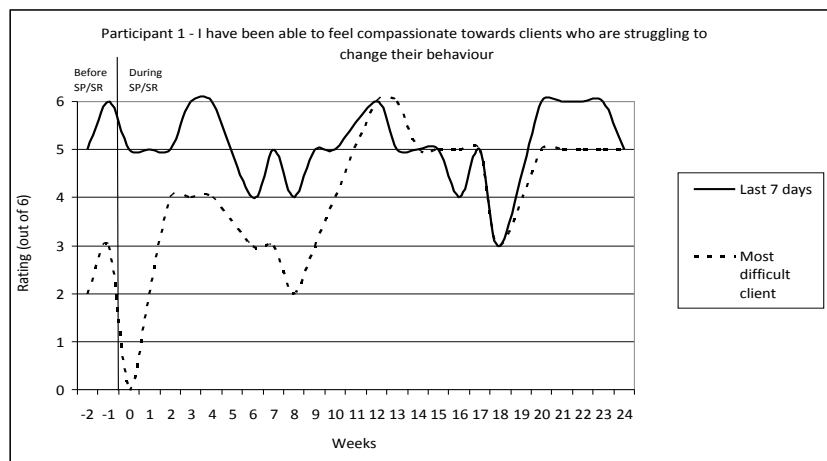

Figure 1. Graph illustrating differential response for "average client" versus "most difficult client"

As in previous studies (Davis et al., 2015; Thwaites et al., 2015) the self-rated impact of the SP/SR was usually greater for the "most difficult client seen in the last seven days" than for the "the average client seen in the last seven days". An example of this is illustrated in Figure 1 where the PWP experienced limited change in her ability to feel compassionate towards their average client in the week but illustrates a far greater change for the most difficult client during the week.

Empathic attunement

We were unable to find any specific descriptions of changes in moment-to-moment attunement in practitioner reflections, even though they were hinted at. The examples below demonstrate an intention to change implied in the reflection, but do not provide a clear example of empathic attunement in practice:

"So when I started this module last week I thought it would be good to complete before my hectic weekend of socialising and making plans for moving house. However, what I found is that condensing the task made it more confusing. This has given me insight into the world of the client. I think I will be more encouraging for people to take their time with things, or at least put more thought into homework planning".

Another reflection appears to show increased awareness of a client's resistance, and suggests the potential for greater empathic attunement: *"Also with a client with depression and perfectionist thinking it offered insight, we have discussed using behavioural activation again. I am now more aware of resistance to the intervention based on anxious thoughts where previously I may have overlooked these".*

From the data, it is unclear whether the absence of specific examples of empathic attunement means that there were no such examples, or that there were changes which practitioners did not report.

Empathy communication skills

There were some clear examples in the modules of how PWPs were communicating about low intensity interventions differently with their clients. One PWP described:

"I feel I have become much more confident in explaining the rationale for getting a problem statement, setting goals and reviewing progress and as such I have noticed an improvement in clients completing homework tasks, coming ready to sessions to ask questions or problem solve an area of self-help they feel they have got stuck with. Overall being able to say to clients that there really is no right or wrong way to do the things I am asking them to do and explain that it is more about the process and truly believe this as it comes from my own experience I think has made the biggest difference."

and

'I have to say that I have gained such a lot of insight into what it might feel like from the client perspective when they pitch up for help and that this experiential process has helped me to change lots of small things about the way I interact with clients, how I explain things, and the compassion I feel for those clients who take a long time to get us (often those with multiple failure to engages and treatment episodes) DNA, don't complete homework or disengage.'

PWP self-ratings on the Cognitive Therapy Empathy Scale typically demonstrated small increases in empathic communication skills e.g. the ability to convey to clients that the way they were feeling was understandable (empathic communication). Figure 2 provides an example.

Empathy knowledge

We were unable to find any examples of the participants describing an impact on declarative knowledge regarding empathy in the participants' reflections. There were clear examples of new learning but these tended to be more descriptions of changes in empathic stance and attitude having experienced therapy from the inside out, rather than descriptions of developing new knowledge (e.g. about the role of empathy in therapy).

Discussion

Consistent with previous studies of SP/SR with a range of different therapists (Gale & Schroder, 2014; Thwaites et al., 2014), the present study suggests that SP/SR may be an effective post-qualification development strategy for enhancing PWP interpersonal skills and in particular empathy skills. The analysis of practitioners' reflections suggested a differential impact of SP/SR on different elements of therapeutic empathy, with the greatest impact on therapist stance/attitude and little or no impact on therapist declarative knowledge. There appeared to be a moderate impact on empathy communication skills, but relatively little reported impact on empathic attunement. Therefore, while there was clear evidence of a change in attitude towards the client's experience from PWPs' own self-practice, there was only limited evidence of the transfer of this new understanding to the clinical skill of empathic communication, and no direct evidence of transfer to empathic attunement.
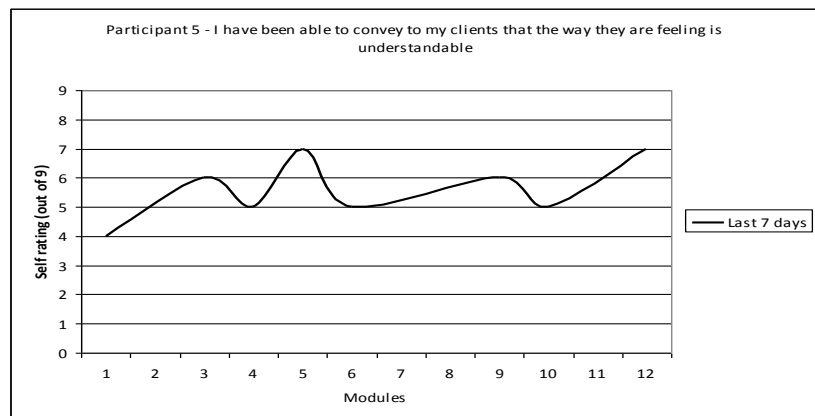

Figure 2. Graph illustrating example of self-rated aspect of empathic skill

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There are several possible explanations for a differential impact of SP/SR on different therapy skills. One explanation might be that there is a reporting bias. It may be that all elements of empathy are impacted by SP/SR, but that it is easier for practitioners to notice a change in attitude and a change in communication skills than a change in attunement or knowledge, which may be largely implicit processes without an easily observable external component. We consider this unlikely for the reasons below.

in the SP/SR workbook are designed to facilitate this (e.g. *"...How will this affect your attitude or approach towards this particular client? What will you be doing differently in your sessions? What will this look and feel like?"*).

In retrospect, we suggest that the translation from empathic stance/ attitude to empathic attunement and communication skills might have been enhanced if the SP/SR facilitators had provided clearer guidelines on what to reflect on, and created follow-up questions on the message board for moving

understandings of empathy. The DPR model (Bennett-Levy, 2006; Bennett-Levy & Thwaites, 2007) and previous research would suggest that experiential approaches such as SP/SR typically do not tend to impact directly on declarative knowledge (Bennett-Levy et al., 2009), except in novice therapists with little or no declarative understanding (Bennett-Levy et al., 2001). Accordingly, the already high levels of declarative knowledge pre-programme in these more experienced practitioners might account for the absence of reported declarative knowledge gains.

There is one other noteworthy difference between the present study and a previous SP/SR study with experienced CBT therapists where the therapists reported changes in attunement and communication skills (Bennett-Levy et al., 2003). In the previous study, the experienced therapists undertook a different form of SP/SR – 'limited co-therapy' pairs, where each therapist gave and received five sessions of CBT focused on a particular issue, and then reflected on the experience. Quite apart from the differences in experience and training between the present participants and the 2003 study, we suspect that opportunity to experience attunement and interpersonal communication skills directly from their partner and to reflect on the impact on themselves highlighted the value of attunement and communication skills. Furthermore, the co-therapy form of SP/SR enabled them immediately to monitor and practice their own attunement and communication skills, and notice how SP/SR created a difference. We suggest that, where therapists already have the requisite face-to-face CBT skills, the 'limited co-therapy' form of SP/SR may be particularly helpful in translating empathic stance/attitude into attunement and communication skills, since it enables immediate reflection and practice of the skills with a partner.
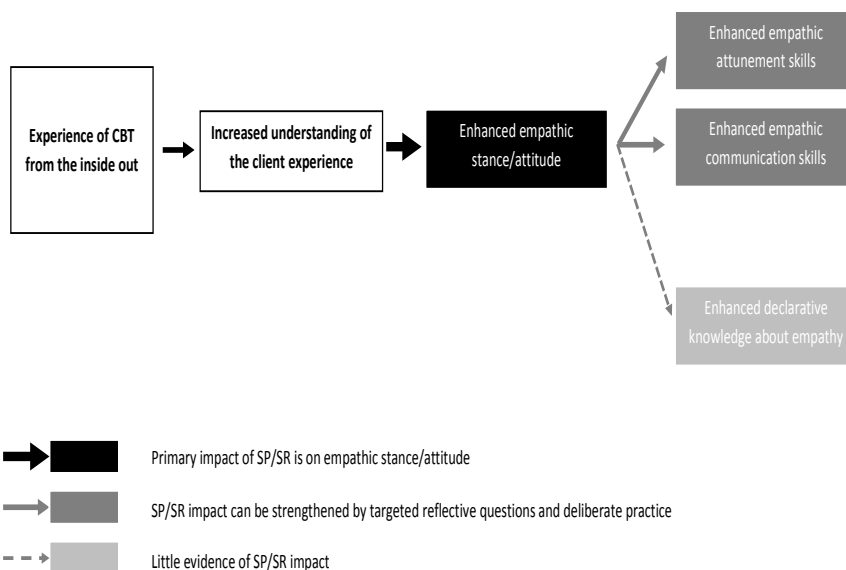

Figure 3. Hypothesized differential impacts of SP/SR on the four elements of therapeutic empathy

A second, and in our view more likely, explanation is that the most direct impact of SP/SR may be on therapist stance/ attitude as a direct result of practitioners' emotional experience of SP/SR and their own struggles to change behaviours. This idea is illustrated in Figure 3. According to this hypothesis, changes in empathic attunement and communication skills are likely to require further reflection and deliberate practice (Bennett-Levy & Thwaites, 2007; Chow et al., 2015). We have previously suggested that one of the key processes in SP/SR is the use of self-reflection to 'bridge' between the Personal Self (experience of CBT from the inside out) and the Therapist Self (professional learning) (Bennett-Levy & Haarhoff, in press; Bennett-Levy et al., 2015b). The structured self-reflections

from reflection into implementation in practice. This would have ensured deeper and more professionally useful reflection and maximised learning from the self-practice. For example, if a participant's reflections were only on their personal experience, the facilitators could have provided more guidance to assist them in creating a 'reflective bridge' between personal self-reflection and therapist self-reflection (Bennett-Levy & Haarhoff, in press). Ideally, the bridge would not only assist practitioners to look at the implications of their personal experience for their therapeutic practice, but would lead them to translate their new understandings into new practices with clients.

It was not a surprise that no changes were reported in declarative

Limitations of the study

The study methodology relied on the researchers' data analysis to determine which of the four elements of therapeutic empathy were present in practitioners' self-reflections. However, no specific instructions had been given to the practitioners to reflect on their experiences of empathy, and no instruction was given

about these four elements and the need to distinguish between them. Therefore, we cannot know for sure whether these unguided reflections represent the degree to which there was change (or not) in the four elements. Furthermore, practitioner reflections on a discussion board may not be the best way to note changes in the four elements as typically the reflections may be written some time after clinical contact.

Another limitation is that the sample size of participants is small. The study would have benefitted from more participants who might have provided examples across each of the four elements of therapeutic empathy. This particular group of participants were all experienced and effective PWPs with no identified therapeutic empathy deficits prior to the study. The study provides some evidence of how SP/SR can help to enhance empathy skills in a relatively skilled group of practitioners but does not tell us anything about whether SP/SR would help an individual with general low levels of therapeutic empathy (Bennett-Levy & Thwaites, 2007).

The quantitative aspect of the study relied on one measure of empathy based on self-ratings, and did not include any client-rated measures or observer ratings, either of which would be desirable. It would be helpful if future studies included such measures where possible.

Conclusions

This pilot study provides some support for the use of SP/SR as a focused training strategy for experienced PWPs to develop enhanced empathic stance and skills. There was also some evidence that the impact of SP/SR was maximised when PWPs were faced with more interpersonally challenging clients who required the practitioner to "flex" low intensity interventions while resisting therapeutic drift. Further studies are needed to examine the impact of SP/SR on therapeutic empathy and other interpersonal skills and knowledge of trainee PWPs (Farrand et al. 2016). Although empathy dots can provide PWPs with clear reminders not to forget basic therapeutic empathy whilst training, SP/SR may provide more specific empathy skills training, particularly if trainers facilitate reflective questions and practices which help

practitioners to translate changes in empathic stance/attitude into attunement and communication skills. If New Zealand is to introduce PWP training at some time in the future, SP/SR should be considered as a potentially valuable training strategy to enhance interpersonal skills and integrate them with the low intensity technical skills.

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"I thought I was going to die": Teachers' reflections on their emotions and cognitive appraisals in response to the February 2011 Christchurch Earthquake

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This article reports a subset of findings from a mixed-methods study reporting the emotional impacts of the February 2011 earthquake on a small sample of twenty Christchurch teachers, who functioned as first responders when this struck while they were on duty at school. This article reports a qualitative analysis of their retrospectively reported emotions experienced at the impact of the disaster and early aftermath, through the lens of Lazarus's (1991) cognitive-motivational-relational emotion theory. Focusing on the emotions and appraisals as discussed in a narrative context, the qualitative findings provide support for Lazarus's core relational themes for fright/fear, anxiety and relief. The teachers' retrospective appraisals and core relational themes supported previous emotion appraisal research. The emotion findings also resonate with other Christchurch earthquake research findings.

Keywords: fear anxiety and relief, cognitive appraisals, core relational themes, teachers' emotions, February earthquake 2011 .

Introduction

On Tuesday 22nd February 2011, routine lunchtime was underway in education settings throughout Christchurch, New Zealand, when a 6.3 magnitude earthquake struck the city. Hearing the rumble of a supersonic boom and feeling the bouncing trampoline-like movements underground, teachers recalled instantly thinking or looking at each other wordlessly to convey the question, "Is this going to be a big one or not?" (Geonet Sciences [GNS], 2011a; O'Toole & Friesen, 2016, p. 61). The answer came immediately in the affirmative through the forcefulness of the earthquake's accelerations at twice the force of gravity (GNS, 2011b), making it difficult for some teachers to remain standing so that the children could see them for guidance. For schools on or close to hillsides and in central city buildings, cascading cliffs and rocks, and the "clatter of bricks" and falling masonry respectively, provided compelling evidence of the earthquake's severity (O'Toole & Friesen, 2016). This earthquake was technically part of the aftershock sequence from a previous 7.1 magnitude earthquake that struck the region on 4th September, 2010. (GNS, 2011a). The September earthquake had been an unexpected event that shocked residents from their sleep at 4.35am on a Saturday morning, causing extensive destruction but no fatalities, mainly attributed to its timing. However the September earthquake caused significant psychological and financial impacts on the populace, and five months later, the city was in early recovery mode, while also coping with thousands of aftershocks up to and including 12.51pm that Tuesday (Rowney, Farvid & Sibley, 2014). The lower magnitude February earthquake was more violent, traumatic and devastating than its predecessor, causing further building collapses, 185 fatalities and injuring at least 8600 people (Richardson & Ardagh, 2013). The February earthquake also brought extensive further liquefaction and triggered another series of aftershocks, including two earthquakes on 13th June, 2011, another school day (GNS, 2011c).

At 12.51pm on Tuesday 22nd February, 2011, approximately 150,000 students and 10,000 staff were in school or education settings (Education Review Office [ERO], 2013, p. 3). The teachers' unspoken question about the size of the earthquake confirms that large aftershocks were expected, in the context of thousands of aftershocks since September 2010, in a uniquely unprecedented "long drawn-out process" (Wilson, 2013, p. 209). Since September, schools had updated their safety protocols and had practised their earthquake drills such as "stop, drop and cover" or "turtles" (Education Review Office [ERO], 2013, p.8) for younger children. Despite the extreme threat to environmental and personal safety, no fatalities occurred on school premises (O'Connor, 2013). The city's children remained safely in the care of their teachers until they could be returned to the care of their families. Immediate tragedies for many Christchurch families upon this earthquake's impact, and the logistical difficulties in negotiating damaged roads, liquefaction, congested traffic, and/or travelling on foot, for caregivers to collect children from schools, meant that some teachers remained at school with children until late into the night. Beyond the first 24 hours, Christchurch teachers continued to support children and families through school based community hubs and individual communications. Three weeks later, while the city remained under a state of emergency for a further nine weeks approximately, teachers returned to duty to tend to the 84% of school children/students who had returned to 64% of schools that had reopened (Ministry of Education [MoE], 2012). Some schools were relocated temporarily or permanently and others were site sharing.

The pivotal role played by the Christchurch teachers as non-professional first responders and beyond, took some time to be acknowledged (Mutch, 2015; O'Toole & Friesen, 2016). Personal repercussions such as their increased potential for burnout as a personal cost of their immediate and continuing support of children/students and families have also recently been documented (Kuntz, Näswell & Brockett, 2013; O'Toole & Friesen, 2016). Studies of the personal repercussions on other Christchurch professionals associated with the first response, at various time frames post-earthquake such as: the police, 12 to 18 months later (Snell, Surgenor, Dorahy & Hay-Smith, 2014); hospital nurses, three years later (Johal, Mounsey, Brannelly & Johnston, 2015), and junior doctors on emergency duty up to three months later (Sheehan, Thwaites, York & Lee, 2014), indicated similar concerns that the personal impacts on helping professionals may have been under-appreciated and that these to be better understood. International post-disaster research on teachers specifically, has argued a similar need to pay more research attention to the emotional impacts on teachers, due to the nature of their role in supporting students post-disaster in a hometown disaster context (Carlson, Monk, Irons & Walker, 2010; DeVaney, Carr & Allen, 2009).

Wilson (2013) has highlighted the sudden and unexpected commencement of the 2010 series of earthquakes and the hitherto relative lack of an earthquake history, as having fostered a belief that Christchurch was "one of the safest cities in New Zealand" (p. 211). He found that this has impacted the community's resilience, which he described as, a "weakly-developed social memory has been partly responsible for relatively weak adaptive capacity so far" (p. 214). This observation is consistent with findings from a recent study investigating the core cognitive themes of Christchurch adults from two suburbs contrastingly affected by the September 2010 earthquake (Kannis-Dymand, Dorahy, Crake, Gibbon & Luckey, 2015). These authors found that despite the ongoing aftershocks, cognitions relating to "current threat" (p. 282) and "safety seeking" (p. 282) reduced post September and pre-February, perhaps

reflecting the realization that not only had they survived individually but there had been no loss of life, and possible "habituation" (p.284). However there was an increase in cognitions relating to "worry and concern" (p. 284). Kannis-Dymand et al. recommend that post earthquake peritraumatic cognitions should be examined as an important variable post-earthquake.

In light of the various findings above, the present study aims to contribute the perspectives of a small sample of teachers to the current "social memory" (Wilson, 2013, p. 214) and growing body of knowledge on the responses of helping professionals to the Christchurch earthquakes. Given the likelihood of further major earthquakes recurring (Sheehan et al., 2014; Wilson, 2013), the aim of the present study is to contribute to the ongoing recovery efforts with and for teachers as helping professionals, and assist with future disaster response planning.

Post Disaster Impacts

A community's recovery from a large earthquake can be difficult and challenging, as people try to balance their desire for normality in their daily lives, with the multiple issues that undermine their recovery (Gordon, 2013). Negative emotions that might be expected include sadness, grief, regret, anxiety, worry, fearfulness, depression and a fluctuating mood (Gordon, 2013; Rowney et al, 2014). Accompanying states may include stress, fatigue, financial stress, insecurity, loss of self-confidence and pessimism (Gordon, 2013). Sleep disturbances, hypervigilance, guilt and feeling in limbo have been reported by Christchurch residents following the September, 2010, earthquake, partly due to the relentless aftershock sequence (Rowney et al, 2014). International research focusing on teachers post disaster, has reported a similar range of negative emotions. For example, following the 7.4 and 7.3 magnitude earthquakes in Turkey in 1999 (Akbaba-Altun, 2005), and the 2008 Wenchuan magnitude 8 earthquake (Long & Wong, 2012) principals and teachers respectively reported shock, anxiety, panic, stress, hypervigilance, post-traumatic stress, depression and grief. The risk of teachers and helping professionals experiencing negative

emotions during and beyond a natural disaster, may be increased in situations where they function as untrained first responders, such as occurred following Hurricane Katrina (Campbell, 2007; Kuriansky, 2013). Hometown disasters also bring further impacts for teachers and helping professionals such as increased workload demands (Kuntz et al., 2013), and personal loss (Snell et al., 2014). Teachers are also effective facilitators of the recovery of students' psychosocial health both internationally (DeVaney, Carr & Allen, 2009) and locally, post February 2011 (Mutch & Gawith, 2014). But the impact of natural disasters on teachers themselves warrants more research attention (Seyle, Widyatmoko & Silver, 2013). Following Hurricane Katrina in 2005, and Hurricanes Rita (2005) and Ike (2008), emotions reported by teachers trying to balance their daily living needs with supporting their students at school, included poor emotional wellbeing, depression, apprehension and a number of fears related to job security, financial implications, personal property loss and functioning at home in survival mode (Carlson, Monk, Irons & Walker, 2010; DeVaney, Carr & Allen, 2009; Lowery & Burts, 2007).

Positive emotions have also been reported post disaster. For example, Italian researchers found some increases in positive emotions and a corresponding reduction in general distress, anxiety and anger experienced by disaster volunteers who assisted in the relief phase following a fatal earthquake in L'Aquila, Italy, in 2009 (Cristea, Legge, Prosperi, Guazzelli, David & Gentili, 2014). The relief phase of this earthquake was characterized as a more positive phase that followed the "gruesome and intensive rescue operations" (p. 748), and was attributed to volunteers being able to see the benefits of their work. Similarly, following the Christchurch earthquake, alongside the negative emotions of fear, guilt, apathy, frustration, sadness and anxiety experienced by a small sample of Christchurch nurses who were working with trauma victims, the positive states of pride, gratitude, relief, empathy, and happiness were reported (Johal, Mounsey, Brannelly & Johnston, 2015). Like the Christchurch teachers (Mutch, 2015; O'Toole & Friesen, 2016), these

nurses put aside their own fears to "focus on the situation at hand" (Johal et al., 2015, p. 12). Snell et al. (2014) found similar contrasts in the coping and resourcefulness of the Christchurch Police following the earthquakes. Negative emotional impacts related to resource losses included "sadness at the loss of people and history" (p. 9), and disappointment at the lack of acknowledgement from the department for their "'above and beyond' work [in the equivalent of] a war zone" (p. 8). In contrast, resource gains such as enhanced self-efficacy and pride in being able to contribute in their role as police, were also found, similar to the feeling of pride expressed by the nurses above (Johal et al, 2015). These statements from the police have also indicated their perceived antecedents for their emotions. As noted by Freitag, Grimm and Schmidt (2011), the cognitive component of emotion is an aspect of post disaster emotion research that warrants further exploration, and this is the purpose of the present research.

Emotion and Appraisal

This study draws on Lazarus's (1991, 2006) cognitive-motivational-relational theory of emotion, which defines emotions as "cognitive-motivational-relational configurations" (Lazarus 1991, p.13) that change according to how we perceive and appraise our relationship with the environment at any moment. These appraisals may be automatic and unconscious, changing moment to moment, based on our interpretation of the meaning and relevance of events in everyday life (Clore & Ortony, 2000). The act of appraising or "inputing relational meaning" (Lazarus, 2006, p. 10), is an ongoing process of "detecting and assessing the significance of the environment for wellbeing" (Moors, Ellsworth, Scherer & Frijda, 2013, p. 119). Appraisal is therefore key to understanding why emotional responses might differ between-individuals in similar circumstances or within-individuals to similar circumstances on different occasions (Smith & Kirby, 2009). Primary appraisal occurs first, when we evaluate the importance or relevance of an event in relation to our goals, purposes or concerns (Chang, 2009; Moors et al, 2013) also known as "motivational congruence" (Bennett,

Lowe & Honey, 2003, p. 515). For example, is a stressor or event important enough to our wellbeing and safety to warrant a response (Smith & Kirby, 2009)? Is a stressor negative and therefore stressful, or positive and therefore challenging (McCuaig-Edge & Ivey, 2012)? Secondary appraisal includes our evaluations as to whether we blame ourselves or others for the event (agency), our coping potential or perceived control, and the degree to which we have certainty about what will happen next (Chang, 2009; Keltner, Oatley & Jenkins, 2014; Moors et al., 2013). Secondary appraisal therefore determines whether we feel resourceful and able enough to cope with the situation. Problem focused coping potential refers to whether we believe we can act to solve the cause of the emotion. Emotion focused coping refers to the need to make an emotional or psychological adjustment to cope with something that cannot be changed (Smith & Kirby, 2009). The appraisal process also determines the intensity and quality of the experience of an individual emotion including its physiology, action tendencies, behaviours and feelings (Clore & Ortony, 2000; Moors et al., 2013). The secondary appraisal may also be referred to as the "core relational theme" (Keltner et al., 2014, p. 168) or the meaning of the emotion, because it includes the causal attribution, how we might respond, and the future consequences.

Lazarus has identified core relational themes for fifteen basic emotions: eight negative (anger, anxiety, fright, guilt, shame, sadness, envy & jealousy) and seven positive (happiness, pride, relief, hope, love, gratitude & compassion) emotions. Negative emotions tend to be elicited by perceived threat or harm, and positive emotions by perceived benefits. For example the core relational theme for anger is "a demeaning offense against me and mine" (Keltner et al., 2014, p. 168; Lazarus, 2006, p. 16), and is usually blamed on another (Chang, 2009). For fear/fright, the core relational theme is "facing an immediate, concrete and overwhelming physical danger" (Keltner et al., 2014, p. 168). Most emotions also have a corresponding action tendency or impulse that links the emotion to its physiological or behavioural response. For example anger may prompt the

impulse to attack, compassion the impulse to reach out and fright or anxiety the need for avoidance or escape (Lazarus, 2006). Negative stimuli such as frightening sounds, may result in a more rapid and stronger physiological response (Keltner et al., 2014). This may be regarded as an unconscious primary appraisal of a situation that is then unconsciously evaluated, and may motivate a rapid approach or avoidance response (LeDoux, 1993). Recent research has further hypothesised that immediately prior to a primary appraisal there may be a moment of inaction or freezing as an "orientation response" (Schauer & Elbert, 2016, p. 111) that enables a person to stop, look and listen, before fleeing or staying, similar to a deer caught in the headlights of a car (Lazarus, 1991).

Appraisal theory has received considerable research attention, most of which has confirmed Lazarus's (1991) relationships between specific cognitive appraisals and some specific emotions such as anger's core relational theme being related to injustice and someone else to blame, fear-anxiety relating to danger, guilt to self-blame, and happiness related to the belief that one has what one wants (Bennett et al., 2003; Smith & Lazarus, 1993; Tong, Bishop, Enkelmann, Why, Diong, Khader & Ang, 2005; Wong & Tong, 2012). Nezlek, Vansteelandt, Van Mechelen and Kuppens (2008) confirmed these relationships and also found that appraisals may relate to more than one emotion. Strongman (2003) has acknowledged that Lazarus's theory has developed over thirty years, with its core elements of appraisal and coping unchanged over that time, and that this is a "substantial and complex theory, that is likely to have a lasting influence" (p. 88). Overall there is general support for appraisal as an important part of emotion, with consistency of appraisals made by individuals evident over time (Bennett et al., 2003). The veracity of the appraisals themselves cannot be confirmed in retrospective data collection, because appraisals reported after the event may reflect either "post hoc reinterpretations" (p. 519) or "current appraisal of the past event" (p. 519). However, findings on the consistency of appraisals of similar circumstances over time, together with an absence of contradiction from

other contextual observations, means that retrospective appraisals may "at least provide 'noisy' data when other methods of data gathering are inappropriate" (Bennett et al., 2003, p. 519). For example, retrospective appraisals by teachers when asked to remember emotional events that have angered or frustrated them, have shown consistency across more than one study, thus confirming typical triggers of these emotions, such as students not following instructions or misbehaving in class (Chang, 2009; Sutton, 2004).

Appraisals in Teaching, Emotion Regulation and Emotional Labour

Teachers experience a wide range of positive and negative emotions on a daily basis in the classroom (Hargreaves, 1998; Sutton, 2004; Taxer & Frenzel, 2015), for which their appraisals are the most likely antecedents (Becker, Keller, Goetz, Frenzel & Taxer, 2015). Teachers' positive and negative emotions may be elicited naturally in response to their appraisals of student successes and failures respectively (Sutton, 2004). Alternatively, in order to artificially self-generate positive emotions such as enthusiasm, teachers might use self-talk as a reappraisal or "cognitive change" (Sutton, 2004, p. 389) to elicit the feeling of enthusiasm for their teaching. This is one of a number of emotion regulation strategies used by teachers on a daily basis (Jiang, Vaurus, Volet & Wang, 2016; Sutton, 2004). Emotion regulation is defined as "the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross, 1998, p. 275). Emotion regulation may be activated consciously or unconsciously before, during or after an emotional response, and may be preventative (antecedent focused) or responsive (response-focused) (Gross, 2013). Of the various antecedent focused methods, reappraisal is regarded as more effective and better for wellbeing (Gross, 2013), and draws on earlier appraisal and coping theory (Folkman & Lazarus, 1988, cited in Gross, 1998). Other cognitive appraisals that teachers report include their beliefs about presenting a professional image by not acting out negative emotions in front of students

and being positive role models for children (Sutton, 2004). These appraisals are consistent with the emotional labour perspective that service-related professionals should exhibit some, but not other emotions as part of their job requirements (Hochschild, 1983). This may be achieved through surface acting, or deep acting. Whereas there may be some similarities between the emotion regulation strategy of reappraisal and the emotional labour strategy of deep acting (Grandey, 2015; Gross, 2013), it is a topic of debate as to whether teachers actually perform emotional labour or emotion work (Oplatka, 2007). Emotion work refers to teachers' autonomous management of their workplace emotions unrelated to their remunerated job performance criteria, and motivated by their beliefs such as the importance of caring and warmth as underpinning their work (Hargreaves, 1998; Oplatka, 2007). In New Zealand, registered teachers are bound by their Code of Ethics, of which one of the four fundamental principles is "responsible care" (Education Council of New Zealand, 2017, p.1). This is in alignment with the Maori concept of Manaakitanga, meaning an "ethos of care" (Macfarlane, 2010, p. 7). In teaching this hospitable approach gives teachers the same responsibility to their students as a host would demonstrate in caring "for their visitor's emotional, spiritual, physical and mental wellbeing" (ERO, 2016, p.7).

Regarding specific negative emotions in teaching as may be elicited in a natural disaster, fear has not appeared in recent literature that has focused on discrete negative emotions, whereas anxiety has been included (Lee, Pekrun, Taxer, Schutz, Vogl & Xie, 2016; Taxer & Frenzel, 2015). Examples of appraisals made by teachers when retrospectively reflecting on their anxiety include feeling unprepared for teaching, relationships with colleagues and students, and for new teachers feeling concerned about having enough knowledge (Chang, 2009). As noted by Chang, these appraisals fit with Lazarus's (2006) core relational theme for anxiety as facing uncertain existential threat. Anxiety is a "circumstance caused emotion triggered by uncertainty" (Chang, 2009, p. 207). Together with this commonly stated core relational theme, teachers' retrospective appraisals on other

negative and positive emotions such as anger have tended to be consistent rather than contradicted, and have contributed to our understanding of teachers' emotional experiences and emotion regulation in their routine teaching (Sutton, 2004, 2007). In situations where teachers' current perceptions are relevant, such as for the purpose of current emotion regulation (Gross, 2013), their present appraisals of past events may be relevant. Overall, the mechanism of the appraisal process is worthy of further insights for the benefits of emotion regulation, and "there appears to be a movement towards greater agreement about the core features of appraisal theories" (Moors et al, 2013, p. 123).

Antecedents attributions and appraisals

Further analysis of the appraisal process itself has identified the importance of distinguishing between knowledge of the cause of a situation, and the evaluation of its impact (Smith, Haynes, Lazarus & Pope, 1993). Knowledge in this case is the causal attribution (Weiner, 2010) or the individual's inferred cause of the event (David, David, Cristina, Macavel & Kallay, 2006). This precedes the appraisal or evaluation that elicits the emotion. Causal attribution alone as a cognitive process does not elicit the emotion; the evaluated or appraised impact of the event must also occur (Smith et al., 1993). Smith at al. (1993) confirmed the theoretical distinction between attributions and appraisals, the latter being more strongly related to emotional experience, confirming that the attribution needs to be evaluated in terms of its significance to goals and wellbeing, in order for emotion to be experienced. David et al. (2006) repeated and extended Smith et al.'s (1993) results by testing the contributions of appraisal, irrational beliefs and attributions relating to a range of functional and dysfunctional emotions. For anxiety-related emotions they found that irrational beliefs contributed marginally more than appraisals for anxiety, depression, and guilt, while appraisals contributed significantly more to the emotions of concern and anger. For all the anxiety-related emotions tested, the attributions contributed very little. They also noted that there was a qualitative experiential

difference between concern and anxiety.

Emotions and appraisals in a natural disaster

Exposure to any trauma is likely to elicit fear, anger, sadness and disgust (Bovin & Marx, 2011), described as "peritraumatic" (p. 53) because they originate with the trauma and have been associated with subsequent posttraumatic stress disorder (PTSD), which is beyond the scope of this report. Emotional numbing may also occur, perhaps due to the shock of the event itself, or to the speed of events not allowing time for emotional processing. Aside from the typical appraisals associated with these four emotions, Bovin and Marx have noted that individuals may appraise the same event differently based on perceived differences in specific impacts to their wellbeing. In order to understand the peritraumatic response better, Bovin and Marx argue that the peritraumatic experience should be conceptualized as "a rich integration of appraisals, action tendencies, and physiological changes" (p. 60). Grimm and colleagues (2012) have investigated the peritraumatic and post disaster cognitions and emotions of individuals through linguistic analysis of the narratives of trauma victims from seven different types of disasters across seven European countries. Emotional states that they identified as most frequently reported included peritraumatic detachment, fear, and panic with some reports of anger, sadness and depression. Fear was expressed in "gradations [of] nervous, scared and scared to death" (p.117) and was the greatest predictor of subsequent psychological distress. Less frequently reported emotions were "guilt, shame or feeling horrified or helpless" (p. 117). Grimm and colleagues have recommended that future research should investigate peritraumatic emotions and cognitions during different stages of a disaster.

The present study

This article draws on a subset of data from a mixed methods investigation into how twenty Christchurch teachers functioned as first responders on 22nd February 2011 and beyond (O'Toole & Friesen, 2016). Relevant to the present study are the findings that almost half of the present teachers were in highly dangerous environments at the time, and that the teachers' emotion perception and emotion regulation were significant predictors of their teaching efficacy. Although reference was made in previous report to the teachers managing their fears, the scope of the previous article did not allow for detailed analysis of the discrete emotions elicited at the time nor their cognitive appraisals. Having identified the emotions that teachers most frequently recalled having experienced at the time the aims of the present study were to:

1) Identify the core relational themes of the emotions as retrospectively reported and compare them to those of Lazarus (2006). This will indicate whether the emotions and core relational themes as enunciated and elaborated on during the teachers' narrative and semi-structured interviews, follow the previously reported patterns of Lazarus and others since.

2) Improve our understandings of the relationships between specific emotions and the teachers' cognitive appraisals as recalled from a real life post-disaster context, through the lens of Lazarus's (1991) cognitive appraisal theory.

3) Gain further insights into the teachers' experiences of this disaster and to contribute their perspectives and voices to the growing body of research on the Christchurch earthquakes

Method

Participants

Following review and approval of the study by the university human ethics committee, participants were recruited by invitation to all primary schools in the greater Christchurch area, in July 2012. Principals forwarded the invitation to their staff to contact the researcher confidentially to learn more about the project and to arrange their individual interview. The invitation was also extended to any teachers who registered with the University of Canterbury's (2012) QuakeBox research project that was set up to record Cantabrians' earthquake stories (Clark, McGougan, Hay & Walsh, 2016).

Twenty teachers volunteered for the study (17 women and 3 men). These included 15 primary school, two early childhood, two secondary school teachers and one tertiary teacher. Their teaching experience ranged from two to thirty-two years with 45% of the participants having more than 20 years teaching experience (M = 17.15 years; SD 10.05).

Procedures

Following their individual detailed telephone conversation with the researcher and having received further emailed information as to the purposes and procedures of the study, the teachers were invited to participate in an individual interview. These were held in a research interview facility at a local university, away from their current school environment, in a safe suburb of the city relatively undamaged by the earthquakes. All participants were referred to local counselling professionals if the interview raised issues that required further exploration.

At the interview, after reviewing the information and signing consent forms, the teachers told their personal earthquake story and related experiences in the aftermath of the February earthquake. At the conclusion of their retrospective earthquake narrative, the semi-structured interview drew upon the topics discussed in the narratives with more specific focus on their emotions, including how they recalled managing the situation at the time of the earthquakes and during the ensuing 18 months. The semi-structured interviews were based on Sutton's (2004) method investigating teachers' emotion regulation strategies, which was also based on retrospective reports of emotion regulation goals and strategies that teachers recalled using in specific situations. Other open-ended questions discerned further themes and sub-themes (Murray, 2015). The narratives and interviews were recorded, and transcribed verbatim. The strategies of Lincoln and Guba (1985) as recommended by Teddlie and Tashakkori (2009), including independent parallel coding (Thomas, 2006) were employed to ensure trustworthiness of the qualitative analyses.

Results and discussion

Recalled earthquake experiences

Eighteen of the twenty teachers recalled and described their experiences in terms of what they had heard, seen and felt, as though they were re-experiencing the moment through these three senses. For example one teacher recalled:

> *"I could hear a clatter of bricks and it was like I imagine if you bounced loose bricks up and down on top of each other – that's what I was hearing. I thought the building was going to collapse. I was trying to work out what I would do and I knew there was a student right behind me"* (Teacher 15).

Other examples of what was heard included, the sounds of children screaming, and the sonic boom of the earthquake itself (GNS, 2011b), and *"the incredible noise"* (Teacher 11), *"intense noise, like a train"* (Teacher 20). What teachers recalled *seeing* included the children running towards them, children taking the "turtle position" and other trauma, such as *"I saw* [my colleague] b*eing thrown against the wall"* (Teacher 19). Teacher 1 was in a school that was close to cliffs that had collapsed. They rushed to the area.

> *"We could see lunch boxes everywhere. We could barely see anyone, but we were looking for little bodies or if somebody had been pinned by rock. Fortunately, nobody had been. We couldn't see anyone and we did double checks and triple checks 'cos I thought, they're the youngest, the most vulnerable"* (Teacher 1).

Examples of what teachers recalled *feeling* included being, *"under the table, and my back was hitting the top of the table"* (Teacher 5), *"the whole building just rocked and swayed and did this judder-type thing"* (Teacher 7), *"these two steel girders and I could feel them, hear them graunching and moving"* (Teacher 6). Teacher 9 explained, *"I was knocked under the table. I found myself there."* Having come to that realization, Teacher 9 then thought, *"What am I doing here? I need to see where the children were."* Almost half of the teachers also recalled similar immediate inner thoughts and self-dialogue such as, *"is this going to be a big one or not? Is it just a small aftershock?"* (Teacher 20).

Other sensory recollections included electrical smells, and the dust hindering one's breathing. Two teachers whose first recollections did not immediately refer to the three senses, commenced their earthquake stories from their cognitive perspectives. Teacher 3 explained, *"then the quake hit and to start off with, I thought, what's going on?"* She explained it was a *"big shock"*, and *"I was just like, what do you do?"* For the first moment, *"I just stood there – kind of froze"*. Teacher 16's first recollection was more summative as she explained, *"we realised it was severe, and decided it was sensible to get under the table, so the children all got under the table."*

Due to the majority of the teachers' recollections including descriptions of what they had seen, their memories contained a high degree of visual imagery. This is a feature of *vivid memory* defined as "a memory with a clear, vivid, almost lifelike property" (Rubin & Kozin, 1984, cited in Koss, Tromp & Tharan, 1995, p. 119). Vivid memories tend to be created from personally significant autobiographical events and according to Koss et al., may include many extraneous details of the context at the time, similar to Brown and Kulik's "flashbulb memories" (1977, p. 73). Flashbulb memory refers to an individual's memory of a shocking public event such as the assassination of President Kennedy, at which one was not directly present yet recalls vividly, due to remembering what one was seeing, doing and generally experiencing at the time of hearing the news. In the case of the earthquake, this was both a shocking public event and a significant autobiographical event for the teachers with personal ramifications and individual responsibility for other peoples' children, likely to elicit strong emotions. For public and personal autobiographical events, vivid recall is generally attributed to the intensity of the surprise/shock and emotions (usually negative but not solely) experienced at the time, and the personal impacts and consequences for the individual creating the memory (Koss et al., 1995). Even when the event is not entirely unexpected such as the earthquake being part of an aftershock sequence, the more surprising and intensely emotionally-engaging an event is, the more likely the memory will persist and be resistant to intrusions (Hirst & Phelps, 2016; Koss et al., 1995). Another important variable is that "differential attention" (Koss et al., 1995, p. 121) during the event being processed into memory contributes to better memory for the central details that are capturing one's full attention, and less accurate memory for the peripheral details. Although some memory decay can be anticipated, more recent research has shown that cognitive appraisals as to the novelty of the event, as distinguished from the personal and social impacts of the event, may be relevant in the creation of a flashbulb memory (Curci, Luninet, Finkenauer & Gisle, 2001). Even allowing for decay, these findings suggest that the present teachers' earthquake memories may be "well-retained" (Koss e al., 1995, p. 124), with such "longevity [having been] created at encoding" (p. 125).

Assessing the situation

Having described these first moments, confirming the whereabouts and ensuring the safety of the children or colleagues nearby were stated as the next behavioural priorities (O'Toole & Friesen, 2016). Their recollected cognitive appraisals also revealed their rapid summation of the situation and assessment of what was needed to be done. As one teacher explained, *"Well, if you were being a professional, this is the time to have your act together and make it all about all of these children in your care."* Another teacher explained, *"You just had to. You were now…you became now not only the teacher but you became the caregiver of these children."* These cognitive appraisals are indicative of secondary appraisals (Lazarus, 2006; Keltner et al., 2014), confirming their agency and responsibility for these children in their care, with the motivational relevance being the children's/students' safety, which tended to be expressed by the majority of the teachers (O'Toole & Friesen, 2016).

Discrete emotions and core relational themes

The transcripts were imported into NVIVO 11, and 120 nodes were created for the various emotion and emotion-related words that were uttered by the participants during the narratives and interviews. The nodes provided the summary of frequencies of utterances, expanded sections of the transcripts and the sources of these. This enabled accurate and readily available data on the frequencies and grouping of the texts (transcript excerpts) to compare the examples. The emotion data presented here are confined to the terms that relate to Lazarus's basic emotions and core relational themes, for the emotions that were most commonly referred to in the teachers' narratives and interviews as having occurred *early* in the disaster. These emotions were fear/fright, anxiety, and relief. Any exceptions to this are due to the same emotion being expressed in the present day context with similar core relational themes, and will be indicated. Briefer results for stress, sadness and gratitude will then be summarised.

Fright and fear

The most frequently recalled emotion reported by the teachers 18 months later, was fright/fear. Lazarus (1991) used the terms *fright* and *fear* synonymously to denote the response to concrete and sudden threats. He regarded *fright/fear* as a more primitive response than anxiety, which is part of the same emotion family, and relates to threats that are less obvious. Both emotions are future focused. The core relational theme for "fright" is "confronting an immediate, concrete and overwhelming physical danger" (Lazarus, 2006, p. 16), with the associated action tendency of avoidance or escape. As the teachers recalled their fear/fright emotions as experienced during the earthquake at 12.51pm, they used these terms in different ways to describe their immediate fear-related emotions, and included descriptions of their antecedents, attributions and/or appraisals, as presented in Table 1.

As shown in the examples in Table 1, "fright" was stated in several different ways by the teachers as they described the first moments of the earthquake. The terms "fright" and "frightening" were often used to indicate specific antecedent events that suggested imminent danger and causal attributions for fright such as the teacher being hit by the clock. Unless the teachers followed up their antecedent description with a statement about how they felt, having actually experienced the emotion may not be confirmed. They have made the causal attribution and then described their behavioural response, and may or may not have actually experienced the fright/fear. Therefore this may indicate an objective approach in order to not feel frightened. One teacher stated very clearly having been "frightened", and in order to cope with the experience of this fear, this teacher took a deep breath and "put on the teacher's hat" in order to get on with what was needed next. Similar appraisals of imminent of death were stated by several teachers, mainly those in buildings that partly collapsed or who were near or on hillsides that collapsed, for whom the danger was immediately obvious and the fear more visceral (O'Toole & Friesen, 2016).

Consistent with Lazarus's core relational themes, were the high perceived relevance and goal incongruence (Table 1), meaning that the present situation was incongruent for the children's and students' safety, and had to be escaped. Where the action tendencies could be followed, this enabled problem focused coping (Smith & Kirby, 2009) through facilitating the children's escape to safety. When action was not immediately possible there was evidence of emotion focused coping (Smith & Kirby, 2009). For example, the teacher who was trapped in a stairwell (Table 1), was immobilised in that one spot until the shaking stopped,

Table 1
Teachers' terms, contexts and appraisals for fright/fear at 12.51pm on 22.02.11

Emotion	Context	Antecedent/Attribution/Appraisal	Relevance & Goal Congruence
Fright	Standing in classroom	"It was the classroom that gave me the fright the most, with everything spinning around it..	… and I remember the windows and I was like, 'Are they going to break?' And the kids were right beside them and I was like, 'Oh no. What's going to happen?' As soon as it stopped, we grabbed the kids as you could – it didn't matter how you could grab them, and exited the building"
Frightening	In the resource room	"One thing that was actually frightening was that I got hit by a clock and all the glass like smashed on me. I hadn't been hit by anything before, so that was new experience…	….and then of course, I didn't leave. I just kind of stepped over the glass and went and my grabbed two kids that I was responsible for."
Frightened	Collapsing building	"I mean I was frightened, yes, but I thought, 'Ok this is it. The world's going to end and I'm going to die…	… you take a deep breath and put on your teacher hat you go and do whatever it is you've got to do. You push down anything that you were feeling yourself."
Fearful	Trapped in stairwell	"I was just very fearful and I remember I could hear my heart beating rapidly and I could feel my breath [demonstrates shallow breathing] and I just thought, I really thought that I was going to die. My mind was just blank. I just thinking, "This is the end for me. Please don't let it be the end, you know, but it seemed you know, I was getting ready for it…the whole building was just going to go 'bang!' you know and bury me in rubble and the funny thing was that for [a long time] after it, every day I was back there in some point during the day….	… I shouted, "Is everybody ok in there?" And as soon as I said that, there were two young international students who'd been in the kitchen just a little bit further down and they came running out at the speed of a cat…they'd been frightened and they ran down those stairs!
Fear	Running to the children outside	"I was just thinking there was so much fear and panic running through us, so I remember after that, I just - as fast as I could move, tried to get round our classroom, around to where the kids were and I only just got to the end of the room, the end of the classroom and then all the dust was just coming like a massive sea and then all the kids were coming round and then I was the first teacher they saw after the duty teacher was scooping them out, I was the first one to greet them and they all just started dropping at my feet 'til they made a turtle on the ground and I was trying tell to them that this was not a good place to make a turtle…	…we have to get away from the cliff you know and they were just covered in dust and it was quite horrific. In my class, I did have two quite needy wee girls and most of my class actually clung to me like in a line – they clung to a tee-shirt piece each in a line and held hands. These other 2 girls just couldn't walk, so I had to pick them up and carry them and they'd all wet themselves and it was just like once we kind of got them off the ground and we kind of were ushering them in the right direction and I had a girl in each arm, which is just ridiculous – there's no way I can usually carry them. My class like were behind me like a big line holding on"

and unable to do anything physical in response to the action tendency to escape (Lazarus, 1991). This teacher could only resort to emotion-focused coping through praying for this to not be the end of his life, until the shaking stopped, before then checking on others. This teacher has revisited this fear at least once per day over an extended period of time since.

Other derivatives of fright

Lazarus (1991) has indicated that fear/fright may be expressed in other terms, which may indicate different intensities of the emotion experience, similar to the "gradations" noted by Grimm and colleagues (2012, p. 117). Other terms that fall within the category of *fright/fear*, include *horror, terror* and *fear*. A further group of terms including *dread, alarm* and *panic*, may be regarded as more "ambiguous" (p.238) and applicable to either *fright* or *anxiety*. Five of these other terms were used by the teachers, to describe their fear-related emotions, as presented in Table 2.

I'd been supporting all afternoon, were there supporting me."

"Horrible" was used by a number of teachers as an antecedent to feeling possibly horror or fear. The horror inducing premonition that the bridge might collapse as this teacher was driving home that day was a logical fear, given the number of bridge approaches that did collapse. Similar to the variations on "fright", "scared" described the emotional state. In Table 2, the teacher was scared that she might not be able to control herself in front of the children, if there were severe aftershocks upon returning to work. Similar to "frightening", scary described antecedents to being scared, such as the rippling ground, fire and smoke making the school grounds a "scary place" expressed as causal attributions yet not confirming whether the teacher actually experienced being scared. The teacher's use of "terrified" indicates her then current emotion in anticipation of the possibility of another earthquake.

action tendencies of Lazarus (2006; 1991). Furthermore they reveal various discriminations, reflecting the teachers' individual differences in their physical context at the time of the earthquake and the differences in their recollected experiences and responses to their fears elicited by the disaster. As noted by Lazarus, the various other terms used "carry multiple connotation having to do with the intensity of the reaction, its source, ambiguity, action tendency and mixtures of other meanings, as in panic, and horror" (1991, p. 239). These various discriminations may also be an indicator of their emotion perception ability previously identified in this sample as related to their teaching self-efficacy beliefs (O'Toole & Friesen, 2016). Emotion perception refers to the ability to accurately perceive or identify emotions in the self or in others, and requires us to pay attention to and decode emotional signals (Papadogiannis, Logan & Sitarenios, 2009). This includes labeling and discriminating between specific negative emotions, and their intensities (Mayer & Salovey, 2004). Previous research has shown that the better people are at discriminating between their negative emotions, the better they are at regulating these (Feldman-Barrett, Gross, Christensen & Benvenuto, 2001).

Table 2
Examples of teachers' contexts and appraisals for other fright/fear related emotions

Emotion	Context	Antecedent/Attribution/Appraisal
Panic	22.02.11 Same day, several hours later at the evacuation & triage point.	"There was a vicious aftershock. I saw a building collapse and I had a complete panic attack. I was on my hands and knees on the ground vomiting into the grass. It hadn't been the building. It was actually a devastating feeling that I had to get myself out of this."
Horrible	22.02.11 Same day later, teacher travelling home	"I had this horrible premonition that the bridge would collapse underneath us."
	22.02.11 Same day later, teacher collecting her son from camp, I had to go with my son to get his bag out….	and I thought 'what if there's an after-shock while I'm in there?' It's like going down, it's built into the hillside and you're going down 3 levels. And there was no electricity, so it was really dark. And going down to get his bag out! I thought, 'Thank goodness, they didn't bring the kids back in here to get their gear out.' It was horrible. I'll never forget"
Scary	22.02.11 During first minutes, outside at school	"Our front field felt like a metre ripple. It was really full on. It wasn't a calm place to be. There was fire all around us and black smoke, so it was a scary spot".
Scared	Three weeks later, returning to school	"I was really scared when we went back to school that I wouldn't be able to hold it together."
Terrified	18 months later, current feeling	"I'm terrified of another quake."

In addition to derivatives of "horror", "terror", "fear" and "panic", that Lazarus (1991, p. 238) has noted, teachers also used "scared" and "scary" (Table 2). The teacher who experienced a panic attack did not follow the action tendency to leave this environment and stayed with her students until their parents came. She explained that "the poor kids that

In summary, the causal attributions or antecedents and the cognitive appraisals that were expressed during the teachers' informal retrospective narratives using their everyday terminologies to describe their fright and fear related emotions in response to the February earthquake, align with the core relational themes, antecedents, appraisals and

Anxiety related emotions

The core relational theme for anxiety is "facing uncertain, existential threat" (Lazarus, 2006, p. 16). It is similar to fear, except that the antecedents are less clear, the appraisals less directive and the future focus less specific. To feel anxious is to feel a sense of unease due to an uncertain threat, which may be experienced as a current or future oriented appraisal. The action tendency for anxiety is also avoidance or escape, but the problem is that it is not clear what one needs to escape from. Other terms that Lazarus regarded as associated with anxiety include *unease, concern, apprehension* and *worry*. Lazarus (1991) regarded worry as an attempt to make the existential component of anxiety more tangible and argued against separating these two. David et al. (2005) noted that there was a qualitative experiential difference between concern and anxiety. In line with Lazarus's (1991) theory, the teachers' experiences of anxiety and worry are presented in Table 3.

Table 3
Teachers' terms, contexts and appraisals for anxiety and worry

Emotion	Context	Antecedent/Attribution/Appraisal
Anxiety	June 2011: Just when things seem to be getting back to normal. Uncertainty & existential issues:	"June. It was a bit like 'Groundhog Day' in some ways, except that at least, that there wasn't the same situation in the central city because of course, that had already happened. We had time off work again and then just went back into it, so it was just 'carry on', but I think in terms of my own I guess anxiety, that was by far the worst day for me, much worse than February".
Anxious	June 2011: Just when things seem to be getting back to normal. Uncertainty & existential issues:	"After the June one – I was actually really affected by that one because I just thought it wasn't fair and it was just starting to get back into normal and I got really tearful after that one and I ended up going to the doctor because I couldn't sleep and I was just like, 'Ah, the world's going to end', so I ended up going on anti-depressants after that because I was quite anxious"
Worried	February 2011: Returning to school three weeks later Uncertainty:	"A wee bit tentative and worried. When we walked back into our classrooms, there were plenty of things that had fallen down and things that needed cleaning up, which didn't give long to do that before the children came back".
Worry	February 2011: Uncertainty & existential issues:	"It wasn't until a wee bit later until you get the chance to get a breather that you start to worry about your own family a little bit, but then, I remember thinking my son would be at school and it would be exactly the same thing there as it was here. I knew that there would be people taking care of him and likewise my daughter at day-care";
Worrying	Eighteen months on: Uncertainty & existential issues:	"I think she's been working really hard and it's taken a little bit of a toll on her health a little, which is a little bit worrying".

(p. 238), the teachers' appraisals appear to confirm this.

Other derivatives for anxiety

Similar to the various connotations in the different terms used for fear, other various terms were used for anxiety and related emotions, as presented in Table 4. These were consistent with Lazarus's (1991) alternative terms.

These various other terms shown in Table 4, used in relation to anxiety are consistent with Lazarus's "associated terms" including *apprehension, nervous* and *concern*. Feeling apprehensive and nervous appeared to be more aligned with the core relational theme for anxiety, as "facing an uncertain, existential threat" (2006, p. 16), and they were beyond the original event and related to previous fear. Having a "concern" expressed appeared to be stating a priority at the time, and may be regarded as a causal attribution. Feeling "concerned" about what the children were thinking, was less certain and existential, and occurred early in the event. The context for this concern was that the principal had been standing talking to the whole school outside after the first earthquake, when a big aftershock hit, and "then he dropped". She explained that:

As shown in Table 3, five terms were used to categorize anxiety and worry. For example, having survived the September and February earthquakes, the 6.3 magnitude June earthquake was the 'final straw' for a number of the teachers, because this also occurred on a school day, so quickly after an earlier 5.6 magnitude earthquake that same day. This event brought into question a new existential threat and the unanswerable question of how much more do we have to deal with in the future. The June earthquake was also a strong reminder of 22nd February, especially due to teachers and children being back in school. Worry was expressed about family members at the time of the February earthquake until the uncertainties could be resolved, similar to fear in the previous section. This worry tended not to intrude until there was time to focus on it. As also shown in Table 3, the worry that one teacher expressed about his children was reduced based on his trust in their teachers to be looking after his children in the same way he was doing for others'

Table 4
Teachers' terms, contexts and appraisals for other anxiety related emotions

Emotion	Context	Antecedent/Attribution/Appraisal
Apprehensive	Three weeks post February 2011: Returning to work Uncertainty & existential issues	"But just getting back to work – and yeah, I was really apprehensive about getting back into the classroom, 'cos it had frightened me so much and the children."
Nervous	Three weeks post February 2011: Returning to work Uncertainty & existential issues	"I think we were nervous, thinking what if there's more (big earthquakes) and because at that time, they were constantly in the news – statistics about the percentage of risk"
Concern	22.02.11 at the time of the earthquake	"My first concern was their safety"
Concern	22.02.11 Later in the day waiting for parents to come and collect children from school	"There was the concern that those parents might not be alive to come and get their children."
Concerned	22.02.11: Shortly after 12.51pm, outside the principal dropped to the ground when a large aftershock struck	"And when a strong person falls [..] I was concerned about what the kids were thinking because I know how I was thinking. If he's dropping to the ground, what are my kids thinking?"

children. Several teachers said the same. As regards Lazarus's (1991) argument that worry represents an attempt to "make existential anxiety concrete and external in order to better deal with it"

"It scared the living daylights out of me to see him do that. That's how we knew how bad it was.. [seeing him do that] it felt like

the ground was going to open up and to see him go from standing talking to us to [snaps fingers] .. it was panic."

These descriptions show the teacher's strong fear, which preceded her feeling concerned about what the children would think, based on her appraisal. Consistent with previous research, anxiety and related emotions were generally latter emotions, that originated in the fear of the previous trauma and the reminders of these (e.g. Rowney, Farvid & Sibley, 2014).

Relief

Positive emotions were also evident at the time of the earthquake. One of the more prevalent emotions was relief, for which the core relational theme is "a distressing goal-incongruent condition that has changed for the better or gone away" (Lazarus, 2006, p. 16). Relief is "unique" (Lazarus, 1991, p. 281) because it occurs only if some goal incongruent course has been eliminated, thereby reducing emotional distress. In that regard, it is not surprising that relief was one of the most frequent positive emotional states experienced on 22nd February, 2011. Examples of the types of improvements to distressing situations that resulted in the sense of relief for the teachers are presented in Table 5.

day of the earthquake and in line with Lazarus's (2006) core relational theme. For example one teacher expressed her "utter relief" that they had avoided any fatalities by staying put in their classroom as practised in their drills. Relief that the children in their charge were finally reunited with families was the recurring theme for the teachers. One teacher who was in a worst hit area was relieved when her daughter's text indicated that her daughter was in a safer situation than herself. The action tendency for relief is difficult to identify, except that relief *removes* the action tendencies associated with the distressing emotion that it has actually relieved (Lazarus, 1991). Physiologically this might be seen through bodily relaxation, such as shoulders slumping forwards or a deeply exhaled breath out, as the bodily tension is released.

Other Emotions

Stress

Stress and related states such as "overdrive and adrenaline" (O'Toole & Friesen, 2016, p. 62) were excluded from this detailed analysis as they do not occur in Lazarus's list of basic emotions, although Lazarus's (1993) theory of stress is closely aligned with his theory of emotion, for which stress may be an antecedent, correlate or consequence. Whereas a number of the

moments of the earthquake, descriptions of "feeling stressed" and similar (e.g. overwhelmed) tended to be reported in the later aftermath and associated with ongoing recovery issues. This was also similar for anger and guilt. A minority of teachers, including those who had witnessed death and major destruction considered the possibility that they may have been in shock at times due to not remembering some details, as they reflected back eighteen months on (O'Toole & Friesen, 2016). Peritraumatic dissociation was also evident for some teachers. This will be explored in a further article.

Sadness

The core relational theme of sadness is " having experienced irrevocable loss" (Lazarus, 2006, p. 16). This sense of sadness tended to occur for teachers once the loss was later realised. For some it was immediate, having lost friends and/or loved ones who were killed at the time. There is no action tendency for sadness, rather there is "inaction" which is defined as "withdrawal into oneself, that seems consistent with the concept of a mood" (Lazarus, 1991, p. 251). The losses that teachers experienced since the September earthquake were similar to those of all Cantabrians affected (Rowney at al., 2014), and their sadness was similarly expressed. As Lazarus (1991) explained, if a loss is irrevocable there is nothing that one can take action against. Sadness is most likely to be experienced when there is no-one else to blame for this. However if blame can be apportioned, then it is likely that anger - if someone else is perceived to be to blame, or guilt - if the self is perceived to be to blame, will be experienced. At the time of data collection, the teachers expressed a mix of anger and sadness about the personal and professional impacts of the school closures. While closures were understandable, some anger was expressed. The teachers also expressed grief and sadness at the loss of the city and the loss of communities in areas that had been rendered uninhabitable. One type of relief expressed at the interview time was stated by a minority of teachers who for various reasons would not have to deal with the school renewal/restructuring programme.

Table 5
Teachers' contexts and appraisals for relief and relieved

Emotion	Context	Antecedent/Attribution/Appraisal
Relief	22.02.11: Realization of what could have happened but did not	"My very first sense was utter relief that it had come at 12.51pm and not 9 minutes later because we would have been in the street or under the buildings that collapsed".
Relief	22.02.11: Improvement of the situation	"It was a relief when the last child went home".
Relief	22.02.11: News that parents who had not arrived yet, were on their way	"That was such a relief because I thought, 'What am I going to say to these children if their parents don't turn up?'"
Relieved	22.02.11: Later in the day, received a reply from her daughter to a text sent asking how she was	"I was just so relieved that my daughter texted back and said, 'You're in the centre of it'". I don't know how she knew so quickly that XX was in the epicentre. But she said, "You're at the centre and we're alright here." So that I thought, 'Well, if she's alright, H (boy) should be alright.'

Table 5 shows the antecedents and appraisals related to teachers' feelings of relief, most of which occurred on the

teachers described their physiological responses that were consistent with Seyle's (1974) stress response in the early

Other positive emotions

Teachers reported feeling pride in their students and/or colleagues for the ways that they coped with the immediate earthquake response. "Happy" or "happiness" tended to be similar to "relief" at the time of the earthquake and earlier aftermaths. "Compassion" and "empathy" were mentioned infrequently, the latter more in the context of feeling unappreciated and the lack of empathy for the teachers from some of the authorities. Love was often expressed for the children, and was the antecedent for some teachers' prioritising of their safety. All twenty teachers expressed love or related terms for teaching as a profession, which was a separate issue from their anger at the changes. Gratitude, and thankfulness were experienced both at the time of the earthquakes and latterly. Consistent with Lazarus's (2006) core relational theme the teachers expressed their gratitude for 'gifts' that resulted from events beyond their control. For example, in hindsight, the September earthquake was perceived as a gift in that - had it not occurred, we would have not been as well prepared. The same teacher who had expressed her "utter relief" in Table 5, expressed her gratitude "to this building in that it had done a brilliant job of staying intact". Having survived these earthquakes there was an overall sense of gratitude for the simple things in life, and for life itself.

Discussion

The results of this qualitative analysis provide insight into the retrospectively recalled emotional responses of the Christchurch teachers that they remembered when they thought back to the moment that the February 2011 earthquake struck. Having identified the most frequently reported emotions of fear/fright, anxiety and relief that were identified during the teachers' narratives, the first aim of this study was to examine their core relational themes, as evidenced in their naturally recounted narratives and semi-structured interviews. The qualitative data revealed their individual variations in describing their emotions, antecedents and appraisals in line with Bovin and Marx's (2011) perspective that naturally occurring emotions are a combination of richly integrated appraisals, action tendencies and

physiological changes. The teachers' descriptions revealed similar core relational themes to those of Lazarus (2006) and as found in other research with different samples (e.g. Nezlek et al., 2008). The teachers' immediate fear/fright emotions retrospectively reported in response to the earthquake were consistent with expectations as to trauma elicited emotions (Bovin & Marx, 2011; Gordon, 2013), and with previous disaster research both generally (Grimm et al, 2012) and with teachers (e.g. Long & Wong, 2012; Carlson et al, 2010). This article provides a more naturally-occurring, ecologically valid set of examples of core relational themes for fear, albeit retrospectively reported, which appear to follow the same patterns as found in Lazarus's (1991) theory.

The second aim was to improve our understandings of the relationships between these emotions and their cognitive appraisals in a real life post-disaster context. The teachers' reported antecedents, attributions and appraisals revealed some consistencies across the emotion families of fear/fright, anxiety, and relief specific to the disaster context, while also revealing individual variations in their expression of these. Similar to the point made by Bennett et al. (2003) the consistency is confirmatory, even if the veracity cannot be fully confirmed. From the total set of examples, ranging from fright to relief, the range of appraisals provides a series of retrospective windows to the disaster, providing a rich description of the earthquake and its effects on teachers across the city, as they reflected back 18 months later. In his posthumous publication, Lazarus described his lattermost perspective that emotions could be "best regarded and studied as dramatic stories or narratives" (2006, p.28) which he proceeded to explain commence with the emotion and its background proceeding "continuously over time" (p. 28). This description aptly describes the emotion provocation of the earthquake experiences in the teachers' evolving interpersonal and environmental interactions.

The third aim was to gain further insights into the teachers' experiences of this disaster and to contribute their perspectives and voices to the growing body of research on the Christchurch earthquakes As Cantabrians, these

teachers' fear/fright and anxiety reports also align with previous retrospective findings on fear and/or anxiety of Rowney and colleagues (2015), the Christchurch police (Snell et al., 2014), and Christchurch nurses (Johal et al, 2015). These latter two similarities should not be surprising as like teachers, police and nurses are also caring professionals. Furthermore, all three groups were first responders in this natural disaster, which puts all three groups at similar higher risk of adverse psychological outcomes than the general population (Snell et al., 2013). Other psychological outcomes in the community reported by Rowney and colleagues (2014) also resonated with the emotion data from this study. For example, Rowney found that faith/religion was "an asset for getting them through" (p. 9). In the present study, the teacher trapped in the stairwell without the ability to take physical action, prayed for his safety. Other emotions discussed more briefly in this report such as sadness, relief and gratitude, as occurring over time, were also echoed in the wider Canterbury sample. Finally, the wider community entrusts their children to the teaching profession, which then brings these ongoing community impacts into the classroom, with the potential to increase the emotional workload for Christchurch teachers.

Teachers and their caring

One of the striking features of the teachers' retrospective data was their prime focus on the safety of the children in their care, on this very significant day of disaster. As noted above approximately 150,000 students were in school when the February earthquake struck. This event was an extreme threat to environmental and personal safety. Like all workplaces in New Zealand, schools are bound by health and safety legislation to provide a safe physical and emotional environment for students and employees (Ministry of Education [MoE], 2017). Part of this requirement includes disaster preparedness such as the earthquake safety protocols and ongoing drills, which were led mainly by the teachers. Other ethical commitments include teachers' primary professional obligation "to those they teach" (Education Council of New Zealand, 2017, p.1). They must strive to nurture

their students' capacities for thinking and developing their independence, and promote their physical, emotional, social, intellectual and spiritual wellbeing, in line with the Maori concept of hospitality known as Manaakitanga, (Macfarlane, 2010). In education, this is achieved through teachers' kindness and caring (Macfarlane, 2010). The teachers' emotions and appraisals as recalled 18 months later, reflect their ongoing care and concern for their children/students. Not only does their care demonstrate the ethical requirements of their profession, they are also in alignment with international perspectives as to what constitutes 'care' and the role of teachers in providing such care. Examples include: the "caring orientation" (Hargreaves, 1998, p. 836) articulated by feminist authors denoting the interpersonal relationships with students (Noddings, 1992), and sensitivity to students' needs (Bieg, Rickelman, Jones & Mittag, 2013; Oplatka, 2007); the basic human need for relatedness through feeling cared for and cared by others (Deci & Ryan, 2014), and Paolo Freire's "pedagogy grounded in love" (O'Connor & Takahashi, 2014, p. 52) to denote the type of care that should facilitate post-disaster recovery. Teachers themselves have also identified caring as a characteristic of effective teachers, with the converse description of ineffective teachers as "uncaring" (Walls, Nardi, von Minden & Hoffman, 2002, p. 45). Caring is a "nonprescribed role element in teaching" (Oplatka, 2007, p. 1390). Rather than being dictated by regulations, the professional culture and ethical responsibilities of teaching foster the expectation that teachers should "express love, sympathy, compassion, concern and dedication to others, not merely because they are paid to do so" (Oplatka, 2007, p. 1379). Thus, caring is an important component of teachers' emotion work (Oplatka, 2007). From the emotional labour perspective, caring may be an example of positive emotional labour. For example, when enjoyment is experienced in the role of nurturing and in the challenges of teaching, this is positive labour and may reflect why people choose certain occupations that "require particular kinds of emotional labour" (Isenbarger & Zembulas, 2006, p. 132). Isenbarger and Zembylas also observed that "emotional labour seems just an inextricable part of caring teaching" (p.

132), yet caring as emotional labour, has received little research attention to date. In general, caring may be regarded as both an approach and an emotion, requiring both labour and love (Isenbarger & Zembylas, 2006) consistent with previous descriptions of teaching as "a labour of love" (Hargreaves, 1998, p. 840).

Strengths and limitations

This study provides a first in-depth qualitative insight into the specific emotions that a small sample of teachers has retrospectively reported in response to a destructive earthquake that struck while they were on teaching duty. Fear and fright related emotions were the most frequently recalled emotions 18 months later. Fear related emotions have received little research attention in teachers to date , perhaps reflecting the relative uniqueness of the timing of such a disaster, and yet the emotions reported were in line with those of teachers who were on duty during the 2008 Wenchuan earthquake (Long & Wong, 2012). However, there are several limitations that must be acknowledged, which may have relevance for future research. The first concerns the validity and reliability of self-report as a methodology. The teachers' recollections may not be accurate reflections of their peritraumatic cognitions (Kannis-Dymand et al., 2015). People's cognitions and emotions may be influenced by factors that cannot be recalled through reflection (Oatley & Duncan, 1992). However, emotions as self-reports are "subjective phenomena and have an objective existence" (p. 282), and self-reports of emotions and emotion-related cognitions are necessary when seeking personal perspectives (Csikszentmihalyi & Larson, 1992; Lazarus, 1991). Second, self-report data may be susceptible to social desirability bias (Parayitam & Dooley, 2007). Social sharing of emotions may be also biased towards the response of the listener (Pasupathi, 2003). As noted by Bennett et al.(2003), although retrospective appraisals may be "post hoc reinterpretations" (p. 519), in the absence of contextual contradictions, retrospective appraisals may be a useful contribution. The successful safe-keeping of the city's children provides contextual support for taking

an interest in the teachers' retrospective reports. Potential for bias in selecting the examples to include in this article is also acknowledged. These limitations may be countered by the similarity of the findings to previous research on the Christchurch earthquake (Kannis-Dymand et al., 2015; Snell et al., 2014), and other appraisal research with teachers (Chang, 2009; Sutton, 2004) and post-disaster (Bovin & Marx, 2011; Grimm et al., 2012).

Implications and future research

The findings have implications for future research. First the findings confirm the teachers' ability to retrospectively reflect upon their emotions in order to understand them, which is an indicator also of their emotion perception ability (Mayer & Salovey, 2004). Emotion perception precedes emotion regulation ability (Gross, 2013), which was a feature of Christchurch teachers' emotional management in their role as first responders (O'Toole & Friesen, 2016). Future research should focus more on how teachers specifically achieved this regulation, for which this report provides an important first step. Future research could also investigate the cognitive appraisals of other professionals as to whether their core relational themes follow the patterns of Lazarus (2006) in a comparative study.

In line with the recommendations of Rowney et al. (2014), future research could investigate interventions for preparedness. New Zealand will continue to experience earthquakes and the findings from Christchurch studies could be applied to preparedness research and ongoing interventional research. Rimé (2009) has indicated a purpose for people sharing their emotion experiences. Rimé argues that social sharing demonstrates that emotions do not disappear, as soon as the event is over. In collectively experienced public events, social sharing of the emotions contributes to the construction of the collective memory (Rimé, 2009), similar to the creation of a "social memory" (Wilson, 2014, p. 214).

Finally, based on the potential for peritraumatic fear and anxiety to contribute to clinical psychological outcomes such as anxiety, depression and PTSD, future research might consider including teachers in any broader clinical investigation and support that might

be considered for the community as whole, as recommended by Rowney and colleagues (2014). Considering the similarity of the present findings to those of Cantabrians in general, the work of teaching is an "emotional practice" (Hargreaves, 1998, p. 835), with significant emotional labour (Hochschild, 1983) at the best of times. Add to this, teachers' caring orientation (Hargreaves, 1998) and tendency to put the children's needs first, and teachers may be at risk of undetected PTSD or other adverse psychological conditions. For example there is already an indication of post-earthquake burnout in Christchurch teachers (Kuntz et al., 2013; O'Toole & Friesen, 2016). International research has shown that teachers can benefit from interventions even several years post-earthquake (Seyle, Widyatmoko & Silver, 2013). Looking ahead, the school renewal programme has a ten-year forecast (MoE, 2012) and the city's recovery horizon has been estimated as a 10+ year plan (Canterbury Earthquake Recovery Authority [Cera], 2012, cited in Regional Institute of Australia, 2013). Therefore there are continued recovery related stressors yet to be encountered, for the forseeable future and beyond.

Conclusion

The Christchurch teachers have shared their personal emotional responses to one of the most significant disasters in New Zealand's history. Lazarus (1991) has said that emotions tell us how well we are getting along in our world. The teachers' earthquake emotions as recalled provide a retrospective insight into how they remember getting along on 22nd February 2011 and during the early aftermath. By focusing on their recalled emotions and then investigating the associated appraisals, we have shown the wide array of experiences of this disaster that the Christchurch teachers remember. That they were able to attend to our children safely, and continue back at work so soon after the earthquakes is testimony to their competence, their caring and commitment and their willingness to continue their role despite their intense experiences.

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An Investigation of the Fidelity to a Wraparound Process in New Zealand

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Wraparound was first piloted in New Zealand in 2004, but currently no research has been conducted on the delivery of the process within a New Zealand context. Fidelity research is essential to determine the level of adherence to the wraparound practice model. This study aimed to investigate: (a) the level of fidelity to the wraparound process for combined and individual respondent groups overall and for the 10 principles and 4 phases; (b) whether the whole wraparound process or only specific principles and phases were being delivered as intended; and (c) whether there was a significant difference between the ratings of fidelity between the four respondent groups. The Wraparound Fidelity Index Version 4 is widely used to measure Wraparound fidelity. The Wraparound Fidelity Index, version (WFI-4) is a series of four interviews administered to Wraparound facilitators, caregivers or parents, youth (age 11 or older), and team members. Interviews result in quantitative summaries of Wraparound fidelity, based on the ten principles and four phases of Wraparound. Participants included 16 wraparound teams, which included 10 youth, 16 caregivers, 16 team members, and 6 wraparound facilitators. The results from this study supported that overall the wraparound process, for this one program in New Zealand, has been delivered as it was intended to an above average level of fidelity. These results give a preliminary insight into how the wraparound process in this program is being delivered in New Zealand, what aspects of the wraparound process are being delivered well, and where delivery can be improved.

Keywords: Fidelity, Mental Health, New Zealand, Wraparound, Youth

An Investigation of the Fidelity to the Wraparound Process in New Zealand

In recent years, there has been a growing emphasis on providing evidence-based treatments in the mental health field, particularly in child and adolescent mental health, to ensure accountability of services provided and to obtain better outcomes (American Psychological Association, 2006; Burns et al., 1999; Hoagwood, Burns, Kiser, Ringeisen, & Schoenwald, 2001). One intervention with an evidence base currently deemed as promising and research-based is the wraparound process (Suter & Bruns, 2009; Washington State Institute for Public Policy, 2016). Wraparound is an intensive and individualised care planning process guided by 10 philosophical principles (family voice and choice; individualised; strength-based; natural supports; collaboration; persistence; community based; culturally competent;

team-based; and outcome based) and 4 phases (engagement, support and team preparation; initial plan development; implementation; and transition) which coordinates interventions, supports, and services for young people with serious mental health disorders and their families (Bruns, Walker, et al., 2004; Bruns et al., 2010; Burns et al., 1999). Originally pioneered in the United States of America (USA) in the 1980s it has since become increasingly popular and adopted around the world, including in New Zealand, as a community-based intervention to help young people remain and function more effectively in their communities (Bruns, Burchard, et al., 2004; Burns et al., 2000; Shailer et al., 2013). Studies investigating this process have indicated improved youth outcomes including reduced rates of hospitalisations, maintenance of youth within the community, reductions in mental health symptoms, and improved overall functioning (Anderson et al.,

2008; Bruns et al., 1995; Kamradt, 2001; Mears et al., 2009; Vernberg et al., 2004; Yoe et al., 1996). While most studies have been conducted in the USA, with a diverse population; on average, study participants were most commonly identified as Caucasian 56.95% ($SD = 29.99$, range 0–88.24) and African American 23.10% ($SD = 30.00$, range 0–75.36) (Suter & Bruns, 2009). However, currently only limited research is available on this process within New Zealand (Shailer, Gammon, & de Terte, 2013).

Despite wraparound's popularity and studies supporting positive outcomes it has yet to be established as an evidence-based treatment (Bruns & Walker, 2010; Bruns et al., 2010; Suter & Bruns, 2008). Wraparound not being recognised as an evidence based treatment has constrained its implementation in New Zealand (Bruns & Walker, 2010; Bruns et al., 2010; Burns et al., 2000; Suter & Bruns, 2008). An important part of confirming wraparound or any intervention as evidence-based is to demonstrate its effectiveness in practice settings (American Psychological Association, 2006). To do this it must first be ensured that interventions have been implemented as they were intended by determining treatment fidelity so that conclusive statements can be made about treatment effects (Borrelli, 2011; Bruns et al., 2008; Dusenbury, Brannigan, Falco, & Hansen, 2003; Murphy & Gutman, 2012). In agreement, Walter and Petr (2008) assert that one of the main barriers to wraparound establishing a stronger evidence base is due to a lack of fidelity research.

The investigation of fidelity is particularly relevant for those interventions, such as wraparound, which are complex in their delivery and also serve complex populations (Leeuw, Goossens, de Vet, & Vlaeyen, 2009; Pullmann, Bruns, & Sather, 2013;

Rast & Bruns, 2003). Measuring fidelity determines how adequately a programme, or in this case the wraparound process, has been delivered in practice compared to its original specification and design (Mowbray et al., 2003; Walter & Petr, 2008). For wraparound, measuring fidelity requires an assessment of the adherence to the basic philosophy, principles, phases and activities of the wraparound process as well as the supports and organisational systems in place (Bruns, 2008b). A number of fidelity tools have been developed to assess the degree of wraparound implementation including interviews, team observation measures, and document reviews (Bruns, 2008c; Bruns et al., 2006; Epstein et al., 2003; J. S. Walker & Sanders, 2011). The most commonly used tool in wraparound fidelity research is the Wraparound Fidelity Index; now in its fourth version (WFI-4; Bruns et al., 2009).

The WFI-4 provides a comprehensive assessment of fidelity by obtaining the perspectives of four different categories of respondents, wraparound facilitators, caregivers, youth (over the age of 11), and team members, through structured interviews. Interviews take approximately 15-40 minutes resulting in quantitative summaries of Wraparound fidelity including: overall fidelity, fidelity of each of the ten Wraparound principles, and fidelity by activities in each of the four phases. (Bruns et al., 2009). The WFI-4 is designed to assess adherence to the principles and activities of Wraparound, which are considered to be the key foundation of proper Wraparound implementation (Bruns et al., 2013). A particular advantage of the WFI-4 is the ability to assess the entire wraparound process, wherever a given wraparound team is at in the process, through a single interview with a member of each respondent group. According to the standards of fidelity proposed by Bruns et al., (2008) for the WFI, the majority of studies using this as their fidelity measure have been found to be delivering the wraparound process as it was intended to an adequate or above average level of fidelity as determined by a score of 75% or higher (Bruns, 2010; Effland, Walton, & McIntyre, 2011; Moore & Walton, 2013; Painter, 2012; Walker, Pullmann, Moser, & Burns, 2012).

By evaluating wraparound fidelity,

researchers, and service providers are able to make comparisons across wraparound programmes, assess programme drift and provide quality assurance. Information on the adherence to the wraparound process is also required to effectively and reliably measure the outcomes achieved and allow valid conclusions to be made on its effectiveness (Mowbray et al., 2003; Ogles et al., 2005; Rast & Bruns, 2003; Toffalo, 2000). In particular, to determine whether unsuccessful outcomes are due to a failure of the wraparound process itself or a failure to implement the wraparound process as it was intended (Bruns, 2008b; Mowbray et al., 2003; Perepletchikova, Treat, & Kazdin, 2007).

The importance of treatment fidelity is also relevant to client outcomes (Bruns, Suter, Force, & Burchard, 2005; Cox, Baker, & Wong, 2009). A number of studies into the fidelity of wraparound have found a relationship between higher model fidelity and positive client outcomes such as greater improvements in youth's functioning, wellbeing and problem behaviour including internalising and externalising behaviour (Bruns et al., 2005; Cox et al., 2009; Effland et al., 2011; Graves, 2005; Graves & Shelton, 2007). Bruns et al. (2005) found that wraparound fidelity was able to predict change in both child behavioural strengths and caregiver's perception of child progress. A bidirectional relationship between wraparound fidelity and client outcomes has also been suggested (Barfield, Chamberlain, & Corrigan, 2005). Barfield et al. (2005) found that youth who received high fidelity wraparound exhibited significantly better outcomes whilst those who received low fidelity wraparound had poorer outcomes with overall Child Behaviour Checklist scores that deteriorated across involvement in the wraparound process. Findings like these clearly highlight the significance of fidelity research in wraparound implementation and the need to include fidelity measurements in outcome studies to accurately determine effectiveness (Bruns, 2008b).

In 2004, wraparound was implemented as a pilot programme in one District Health Board in New Zealand and has served approximately 200 clients. It was introduced to a further

District Health Board in 2013. However, it has yet to be determined how the wraparound process is being delivered in New Zealand. Fidelity investigations have been indicated to be of particular importance when a model has been first implemented in a new country and different cultural context to ensure adequate implementation (Randall, Wakefield, & Richards, 2012). Therefore, fidelity research confirming that the wraparound process adheres to the practice model is essential. Conducting such research is also a first step along the continuum of establishing an evidence base for wraparound in New Zealand (Bruns, 2008b; Ogles et al., 2005; Randall et al., 2012; Walter & Petr, 2008).

The current study investigated the fidelity of the wraparound process in New Zealand using the WFI-4. It was aimed to investigate: (a) the level of fidelity to the wraparound process for combined and individual respondent groups overall and for the ten principles and four phases as measured by the WFI-4; (b) whether the whole wraparound process or only specific principles and phases were being delivered as intended; and (c) whether there was a difference between ratings of fidelity between the different respondent groups interviewed with the WFI-4. It was hypothesised that: (a) the overall fidelity to the wraparound process in New Zealand, based on both combined and individual respondent groups, would be of at least an adequate level (75% or over; Bruns et al., 2008); (b) all elements, namely the four phases and ten principles, would be delivered to at least an adequate level of fidelity (75% or over); and (c) wraparound facilitator fidelity scores would be significantly higher when compared to other respondent groups of caregivers, youth, and team members. The last hypothesis was generated as when validating the WFI-4, wraparound facilitators were found to rate the fidelity to the wraparound process higher than caregivers, youth, and team members (Bruns, 2010). Therefore, it was believed that the same pattern could be predicted for the current investigation.

Methods

Research Design

A quantitative descriptive theory based evaluation of the wraparound process using a between-subjects, cross-sectional survey design was employed for this study.

Participants

Participants included 16 wraparound teams, which included 10 youth (6 females; 4 males) diagnosed with serious mental health disorders who ranged in age from 12 to 16 years (M=14.80; SD=1.62), 16 caregivers (14 females; 2 male), 16 team members (10 females; 6 males) and 6 wraparound facilitators (4 females; 2 males). The demographic data for youth in the 16 wraparound teams who consented to take part in this study is presented in Table 1. As 6 youth did not complete the WFI-4, the demographic data was also broken down by those youth who did and did not participate in the WFI-4 interview. All 16 wraparound teams were delivered the wraparound process from the same site and at the time of data collection had been in the wraparound process from 2.53 to 18.67 months (M=9.56, SD=4.9). The majority of the families identified as New Zealand European (37.5%, n = 6), followed by New Zealand Māori (18.8%, n = 3), New Zealand Māori/European (12.2%, n=2), Middle Eastern (12.5%, n=2), Other European (12.5%, n=2) and South African (6.3%, n=1). The majority of youth had been in school in the last 30 days (87.5%).

The wraparound process for the 16 teams was coordinated by one of six facilitators employed by the District Health Board. The wraparound facilitators had varying numbers of cases that participated in the study. One facilitator had five teams (31.25%), two facilitators had three (18.75%), another two facilitators had two (12.5%), and one facilitator had only a single wraparound team participate (6.25%).

Wraparound teams ranged from 6 to 13 members, with an average of 9.81 (SD = 1.94) team members. Direct family (e.g., birth mothers and fathers, adoptive parents, siblings and youth themselves) made up 35% of the total team composition. Natural supports (e.g. extended family, school and other support people identified by the family) made up 21% of team composition while formal supports (e.g. mental health workers, social workers, mentors) made up the majority at 44%.

The majority of caregivers who consented to be part of the research were the biological parents of the youth (81.25%, n=13). Other caregivers consisted of an adoptive parent (6.25%, n=1), an aunt who had full custody (6.25%, n=1) and a house parent from an out of home placement (6.25%, n=1). Team members included teachers or other school staff such as deans and school counsellors (31.5%, n=5), the young person's child and adolescent mental health worker (25%, n=4), the young person's social worker (18.8%, n=3), mentors (12.5%, n=2), a residential group home staff member (3.3%, n=1), and a counsellor (6.3%, n=1).

Sampling

Participants for the current study were recruited from the same District Health Board delivering the wraparound process in a metropolitan city in New Zealand. They were a self-selected sample derived from all participants who met the study criteria and who agreed to participate in the research. In order to be eligible to gain access to the wraparound service the youth must be diagnosed with a serious mental health disorder and have ongoing and active involvement with a community mental health service and a child welfare and/or youth justice service (The Intensive Clinical Support Service, 2006).

All clients over the age of 11 and enrolled in the wraparound process for at least 30 days (one month) between September 2012 and May 2013 were approached to participate in the study. Clients who did not meet these criteria were excluded from the study as specified by the WFI-4 administration manual (Bruns et al., 2009). A total of 31 clients were served by the wraparound process between September 2012 and May 2013. Twenty-six out of the 31 clients met eligibility criteria for this study and were approached along with their families by their wraparound facilitators to participate in the study. Of the 26

Table 1
Youth Demographic information

	Total Sample (n=16)	Youth who completed WFI-4 (n=10)	Youth who did not complete WFI-4 (n=6)
Age (years)			
Range	12-17	12-16	14-17
Mean (SD)	14.94 (1.44)	14.80 (1.62)	15.17 (1.17)
Time in Wraparound (months)			
Range	2.53-18.67	4.27-16.83	2.53-18.67
Mean (SD)	9.56 (4.9)	8.81 (3.9)	10.83 (6.45)
Gender			
Female	9 (56.25%)	6 (60%)	3 (50%)
Male	7 (43.75%)	4 (40%)	3 (50%)
Ethnicity			
New Zealand European	6 (37.5%)	3 (30%)	3 (50%)
New Zealand Māori	3 (18.75%)	2 (20%)	1 (16.67%)
New Zealand European/Māori	2 (12.5%)	1 (10%)	1 (16.67%)
Middle Eastern	2 (12.5%)	2 (20%)	-
South African	1 (6.25%)	1 (10%)	-
Other ethnicity	2 (12.5%)	1 (10%)	1 (16.67%)
Number of Mental Health Diagnoses*			
One mental health disorder	5 (31.25%)	3 (30%)	2 (33.33%)
Two mental health disorders	8 (50%)	6 (60%)	2 (33.33%)
Three or more mental health disorders	3 (18.75%)	1 (10%)	2 (33.33%)
Living Situation			
Single parent household	6 (37.5%)	4 (40%)	2 (33.33%)
Dual parent household			
Both biological parents	3 (18.75%)	2 (20%)	1 (16.67%)
Biological mother and stepfather	2 (12.5%)	2 (20%)	
Non-biological caregivers	1 (6.25%)	1 (10%)	
Dual parent household			
Both biological parents	3 (18.75%)	2 (20%)	1 (16.67%)
Biological mother and stepfather	2 (12.5%)	2 (20%)	
Non-biological caregivers	1 (6.25%)	1 (10%)	
Out of home placement	4 (25%)	1 (10%)	3 (50%)
Custody			
Family Whānau Agreements	12 (75%)	9 (90%)	3 (50%)
Full custody	4 (25%)	1 (10%)	3 (50%)

eligible clients who were approached, 16 consented to participate; this equated to approximately 61% of the total available sample.

Measure

Wraparound Fidelity Index – 4 (WFI-4)

The fidelity of the wraparound process was measured using the WFI-4. The WFI-4 is a structured interview which is administered either face-to-face or over the telephone to four types of respondents: parents or caregivers; youth (11 and over); wraparound facilitators; and team members. Examples of the types of questions included in the WFI-4 are: "did the family members select the people who would be on their wraparound team?"; "did the family and its team create a written plan of care that describes how the team will meet the child's and family's needs?"; and "are the supports and services in the wraparound plan connected to the strengths and abilities of the child and family" (Bruns et al., 2009).

The caregiver, facilitator, and team member WFI-4 forms consist of 40 items, whilst the youth interview form consists of 32 items. All items are scored as either No (0), Sometimes/Somewhat (1) or Yes (2). Higher scores indicate greater wraparound fidelity. The WFI-4 interviews are organised on the activities of the four phases of wraparound: engagement (6 items); planning (11 items); implementation (15 items) and transition (8 items). It is designed to evaluate the extent to which the activities of the four phases along with the ten principles (4 items per principle) of wraparound have been adhered to in the implementation of the wraparound process based on respondents' perception of experience. Total measure scores are obtained through an item average score. Interviewers are trained in how to administer and score the WFI-4 including inter-rater reliability criteria (Bruns et al., 2009; Pullmann et al., 2013).

The WFI-4 has indicated good psychometric properties (Bruns, 2010; Bruns et al., 2005; Pullmann et al., 2013). The total score demonstrates adequate (α=.83) to high (α=.92) levels of internal consistency for all respondent types (Bruns, 2010). However, alpha coefficients for phase subscales were not as high ranging from .51 to .82 and even lower again for the ten principles subscales ranging from .30 to .60, indicating caution when examining any between-group differences in WFI-4 subscale scores (Bruns, 2010). Construct validity has been supported using a Rasch partial credit model which indicates that the items on the WFI-4 capture a uni-dimensional construct (Pullmann et al., 2013). Good concurrent validity has been evidenced when correlated with the Team Observation Measure (r=.86; Bruns, 2010; Pullmann et al., 2013). There have also been consistent findings regarding the scores of the WFI-4 discriminating between wraparound and other types of service delivery conditions (Bruns, 2010; Bruns et al., 2009).

As the WFI-4 was developed based on demographics from the USA, it was necessary to adapt the demographic part of the WFI-4 index to fit a New Zealand context and demographic.

Procedure

Consent. Ethical approval for this study was obtained from the New Zealand Ministry of Health's, Northern Y Regional Health and Disabilities Ethics. Informed written consent was obtained from wraparound facilitators, team members, youth, and their legally responsible caregiver who participated in the study. All participants were informed both verbally and in writing that participation was voluntary and would in no way affect the service they would be given or their employment status. Before written consent was obtained information sheets were provided outlining the nature of the research project, their rights as participants, and what would be involved in the study including any benefits or risks.

All participants confirmed participation once the information sheet had been read and formal agreement was recorded through signature of the informed consent and assent sheets All wraparound facilitators employed by the District Health Board delivering the wraparound process consented to take part in the research project. Although only 10 youth decided to participate in the interview part of the study, consent from all 16 families was given to access data on their mental health files. Once consent was obtained from caregivers and youth, team members were selected. To ensure a representative sample as possible team members' roles were grouped into eight separate categories (i.e., social worker, child and adolescent mental health worker, school representative, family member, community member, mentor, house parent, and other service clinician) and randomly selected. Some team members were unable to be contacted as they were on annual leave during study recruitment or indicated that they would be on leave during the interview period. All team members selected and contacted agreed to participate.

Interviews

All interviews were conducted by the principal researcher who had no affiliation with the District Health Board or the program being evaluated. Interviews with the four categories of participants in a wraparound team were completed within no more than 30 days (one month) of each other. Interviews were conducted in person at a variety of locations and were completed where the participant felt most comfortable. All wraparound facilitator interviews were conducted in a room at the District Health Board where they worked.

Caregiver and youth interviews were mostly conducted at their homes while team members were predominantly interviewed at their place of work. If caregivers, youth, or team members did not want or were unable to be interviewed at their homes or places of work then the interviews were conducted in a room at the District Health Board. Each participant was interviewed individually except for some youth where the primary caregiver was present as the interview was carried out in the family home. Wraparound facilitators were interviewed first in most cases, so that any relevant information about risk or mental state could be communicated before the principal researcher went into the family's home. No specific order of interviewing was followed for caregivers, youth, and team members; rather it was based on participants' availability.

Confidentiality statements were provided so all participants were aware of the nature and limits of confidentiality including the extent to which any case sensitive or concerning information would be disclosed. Participants were

advised the interview would be recorded. Participants confirmed their consent and were given the opportunity to ask any questions before interviews proceeded.

For all participants the interview consisted of the WFI-4 interview followed by a series of qualitative questions developed specifically for this research project. This paper only focuses on the results of the WFI-4 interview. At the end of each interview participants were asked if they had anything else to add and were debriefed. Caregivers and youth were given a donation/koha of shopping vouchers to thank them for their participation in the study at the end of their interviews.

If indicated on the consent form participants would be mailed a summary of the results once the research had been completed. This process was followed for all participant groups (e.g., facilitators, families and team members).

Results

Representativeness of Sample

To ensure the sample was representative of the larger population served by the wraparound service a chi-squared test was calculated for gender and considered for ethnicity. A Mann-Whitney U was used for age at referral and amount of time in service.

The chi-squared analysis indicated that the sample did not differ by gender $X^2(1, N=203)=1.48, p=0.23$. Consideration was also given to compare ethnicity of the two groups, but the data was not sufficient to meet the assumptions of the test. The data obtained in this study is therefore able to be generalised based on gender, but not based on ethnicity.

The amount of time the young people were in the service did not significantly differ between the general wraparound service population (*mdn* = 271 days; mean rank 100.04) and the sample population (*mdn* = 347 days; mean rank 124.88) based on the number of days in service, $U=1130.00$, $p>0.05$(ns), $r=-0.11$. However, age at referral for the larger wraparound service population was significantly lower (*mdn* = 13 years; mean rank 99.51) than the age of the study population (*mdn*=14 years; mean rank 131.09), $U=1030.50, p<0.05$, $r=-0.15$. This result was likely due to the age cut off of 11 used for this study

to meet the specifications of the WFI-4.

Wraparound Fidelity Calculation

Bruns et al. (2009) recommend that an item average score is calculated and then divided by the total possible item score to get a fidelity percentage when some items either have a response of 'I don't know' or 'not applicable', which was true for this data set. To determine the level of fidelity to the wraparound process, fidelity percentages were calculated based on item average scores for combined and individual respondent groups.

An item average calculation was used for two reasons. First, to ensure the fidelity score would not be artificially deflated and affect the validity of the results based on the missing data. Second, it was used because there were six youth forms which were unable to be collected due to the young person being too unwell or in crisis, having an intellectual disability, or the young person or parent not consenting for them to take part in the research. The missing youth forms meant that the total number of items when all forms were combined was different for those with uncompleted youth forms. An item average score provided a more robust calculation as it allowed the fidelity calculation to be consistent across all respondents even if there was an uncompleted form (e.g., youth form).

The standards of fidelity determined by Bruns et al. (2008) were used to provide a metric for comparison and levels of fidelity. Bruns et al. (2008) advise that wraparound fidelity percentage scores on the WFI of: 85 to 100 indicate high

fidelity; 80 to 85 above average fidelity; 75 to 79 average fidelity; 70 to 74 below average fidelity; and scores below 69 indicate a non-wraparound level of fidelity (Bruns et al., 2008).

Wraparound Fidelity

The first question of this study was to evaluate the level of fidelity to the wraparound process in regards to overall delivery of the process based on combined and individual respondent groups. In addition, evaluation of the fidelity ratings of the 10 principles and 4 phases was sought. In this article total mean item averages were provided on the WFI-4 for 16 families and a total of 48 participants.

Total fidelity

The overall fidelity of the wraparound process rated across all respondent groups was 81.83% (*SD* = 6.53) which falls in the above average range. The wraparound facilitator respondent group rated the overall fidelity the highest at 88.25% (*SD*=6.99) indicative of high fidelity wraparound, followed by youth (*M*=81.08; *SD*=11.45) and team members (*M*=79.71; *SD*=9.09) both scoring the wraparound process within the above average fidelity range. The caregiver respondent group rated the overall fidelity of the wraparound process the lowest at 78.74% (*SD*=8.49), but this score still indicates adequate wraparound fidelity falling in the average range. Figure 1 illustrates these findings. These results supported the hypothesis that the overall fidelity of the wraparound process would be at least of an adequate level (75% or above) for combined respondents and individual respondent groups.
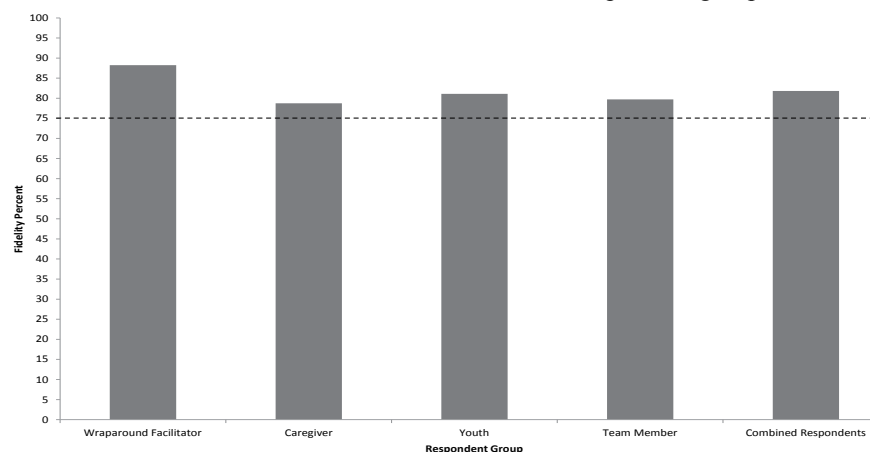
Figure 1: WFI-4 total fidelity perentage overall and by respondent group

Fidelity by phase

The mean fidelity percentage score for combined respondents across the engagement (*M*=84.31; *SD* = 6.78) and planning (*M*= 81.62; *SD* = 8.97) phases fell within the above average range. The implementation phase had the highest mean fidelity score for combined respondents falling in the high fidelity range (*M*=85.19; *SD*=5.74). The transition phase was rated the lowest falling in the below average range (*M*=73.63; 15.18). The hypothesis that all phases would be delivered to at least an adequate level was not supported.

When broken down by respondent group the transition phase had the lowest mean fidelity score for the wraparound facilitator (*M*=84.94; *SD*=14.26), team member (*M*=72.69; *SD*=21.24) and caregiver (*M*=67.75; *SD*=22.76) respondent groups. Caregivers rated this phase the lowest out of all respondents. Despite the implementation phase receiving the highest mean fidelity score for combined respondents (*M*=85.19; *SD*=5.59), when analysed individually, only youth respondents rated this phase the highest (*M*=89.10; *SD*=9.75). The engagement phase was rated highest by the wraparound facilitator (*M*=90.25; *SD*=11.23), followed by the caregiver (*M*=86.69, *SD*=10.10) and team member (*M*=84.94; *SD*=13.08) respondent groups. Youth respondents, on the other hand, had the lowest mean fidelity rating for the engagement phase (*M*=69.30; *SD*=16.66). Figure 2 illustrates the average fidelity.

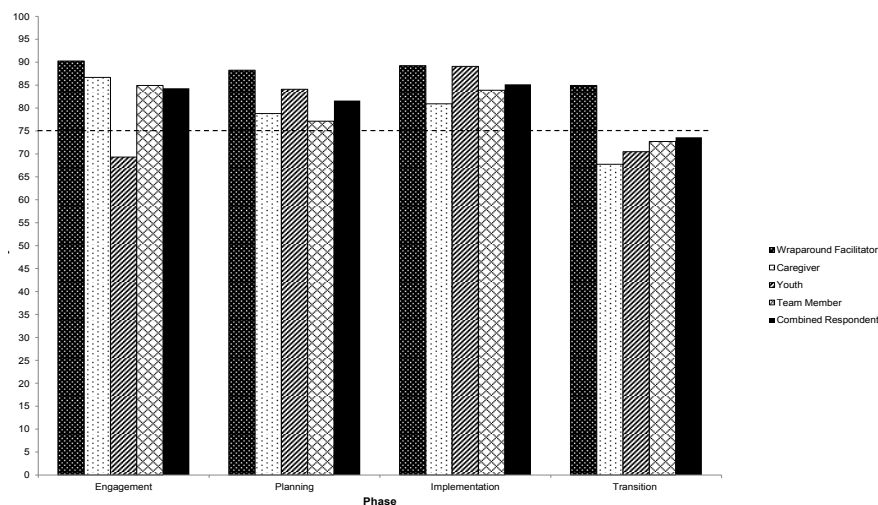### Comparison between phases for combined respondents

To test whether there was a significant difference between the total mean fidelity ratings of each phase for combined respondents the Kruskal-Wallis test was used. A significant difference was found between the engagement (mean rank=36.25), planning (mean rank=32.16), implementation (mean rank=39.44) and transition (mean rank=22.16) phases, with H(3)=7.89, *p*=0.05. Pairwise comparisons with adjusted p-values showed that the statistically significant difference was between the implementation and transition phase (*p*=.05, *r*=0.46). The implementation phase (mean rank=39.44)
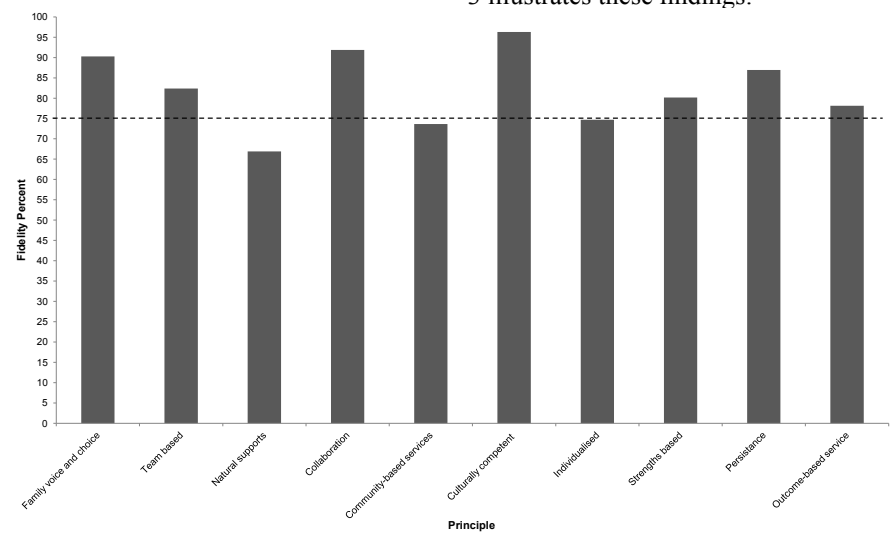
Figure 3: WFI-4 fidelity percentage by principle for combined respondents

Figure 2: WFI-4 fidelity percentage by phase and respondent group

was ranked significantly higher than the transition phase (mean rank=22.16). No other significant differences between the four phases were found at the *p*<0.05 significance level.

Fidelity by principle

The hypothesis that all wraparound principles for combined respondents would be rated at an adequate level of fidelity was not supported as two principles fell in the below average range of fidelity or lower (i.e., community-based services and natural supports). When combined respondent fidelity scores were analysed by principle, eight out of the ten principles were rated at an average level of fidelity or higher. Figure 3 illustrates these findings.

Those principles which had high fidelity ratings included: culturally competent (*M*=96.29, *SD*=3.59), collaboration (*M*=91.88, SD=6.53), family voice and choice (M=90.28, SD=9.89), and persistence (*M*=86.95, 9.22). The principles of team-based (*M*=82.36, 7.23) and strength-based (*M*=80.15; *SD*=12.85) were rated at an above average level of fidelity, while the principles of outcome-based (*M*=78.12, *SD*=15.86) and individualised (*M*=74.69, *SD*=10.40) were rated at an average level of fidelity. The principles rated the lowest were community-based services (*M*=73.63, *SD*=13.42) falling in the below average level of fidelity and natural supports (*M*=66.90, *SD*=15.16) falling into the non-wraparound level of fidelity. That is, the delivery of natural

supports was perceived by combined respondents as not having met the criteria for wraparound.

Comparison between principles for combined respondents

The Kruskal-Wallis test was also used to determine whether there was a significant difference between the mean fidelity ratings of the ten principles. A significant difference was found between the ten principles, $H(9)=69.44$, $p=0.00$. Mean ranks and significant differences are listed in Table 2.

Table 2

Kruskal-Wallis mean ranks for ten principles

Principle	N	Mean Rank
Culturally competent*	16	135.44
Collaboration**	16	114.28
Family voice and choice***	16	109.22
Persistence****	16	95.06
Team-based	16	74.97
Strengths-based	16	72.38
Outcome-based	16	68.5
Community-based services	16	49.41
Individualised	16	48.44
Natural supports	16	37.31

*Culturally competent was ranked significantly higher than the principles of natural supports ($p=0.00$, $r=1.09$), individualised ($p=0.00$, $r=0.94$), community-based services ($p=0.00$, $r=0.93$), outcome-based ($p=0.00$, $r=0.72$), strengths-based ($p=0.01$, $r=0.68$), and team-based ($p=0.01$, $r=0.65$).

**The principle of collaboration was ranked significantly higher than the principles of natural supports ($p=0.00$, $r=0.83$), individualised ($p=0.00$, $r=0.71$) and community-based services ($p=0.00$, $r=0.70$).

***Family voice and choice was ranked significantly higher than the principles of natural supports ($p=0.00$, $r=0.78$), individualised ($p=0.01$, $r=0.66$) and community-based services ($p=0.01$, $r=0.65$).

****The principle of persistence was ranked significantly higher than the principle of natural supports ($p=0.19$, $r=0.62$).

Differences in fidelity ratings between respondent groups

A one-way ANOVA was used to test whether there was a significant difference between the ratings of fidelity between the four respondent groups. A significant difference was found $F(3, 54)=3.77$, $p=0.02$, $w^2=0.13$. Hochberg post-hoc comparisons indicated that the wraparound facilitator respondent group rated the fidelity of the wraparound process significantly higher than the caregiver ($p=0.02$, $r=0.88$) and team member ($p=0.02$, $r=0.75$) respondent groups. Comparison between the wraparound facilitator and youth respondent group was not statistically significant ($p=0.26$, $r=0.70$). No statistically significant differences were found between the fidelity ratings of

the respondent groups whom received the wraparound process, namely, caregivers, team members, and youth. As there was no significant difference between the wraparound facilitator and youth fidelity ratings, the hypothesis that the wraparound facilitator respondent group would rate the fidelity to the wraparound process significantly higher than the other respondent groups was only partially supported.

Due to six youth not completing the WFI-4 an exploratory one-way ANOVA was conducted, with the data removed for those cases which did not have youth forms, to determine whether the significant difference between ratings of fidelity remained without these six cases. When cases were removed for those which did not have youth data no significant difference remained between the mean fidelity score of the four respondent groups $F(3, 36) = 2.60$, $p>0.05$, $w^2=0.11$.

Discussion

Fidelity research is an essential component in confirming that models in practice are being delivered as they were intended. This study aimed to investigate the overall fidelity and implementation of the wraparound process in New Zealand based on combined respondents as well as the

fidelity of the essential elements which make up wraparound, namely its ten principles and four phases. As perception often differs across individuals and groups the study also sought to examine whether the four different respondent groups interviewed with the WFI-4 differed in their perceptions of the fidelity to the wraparound process (Bruns, 2010).

The results confirmed, that overall, the wraparound process in New Zealand is being implemented as it was intended. In support of hypothesis one, individual and combined respondents rated the fidelity to the wraparound process to at least an average level or higher on the WFI-4. High fidelity elements included the implementation phase, and the principles of cultural competence, collaboration, family voice and choice, and persistence. Low fidelity elements of the process were identified as the transition phase, as well as the principles of natural supports and community-based services. The low fidelity scores in these areas did not support hypothesis two that all elements of the wraparound process would be delivered to at least an adequate level of fidelity. Finally, wraparound facilitators were found to rate the fidelity to the wraparound process significantly higher than team members and caregivers. However, no significant difference was found between the fidelity ratings of wraparound facilitators and youth. This finding only partially supported hypothesis three; that wraparound facilitators would rate the fidelity to the process significantly higher than other respondent groups.

Combined Respondents: Fidelity, Phases, and Principles

The overall fidelity score for combined respondents reached an above average level of fidelity based on the criteria established by Bruns et al. (2008). This fidelity rating is relatively consistent with studies of wraparound fidelity using the WFI-4 (Bruns, 2010; Effland et al., 2011; Moore & Walton, 2013; Painter, 2012; Walker et al., 2012). The high and low fidelity ratings of the four phases and ten principles were also in line with previous findings (Bruns, 2010; Cox et al., 2009; M. A. Moore & Walton, 2013). Research into the fidelity of wraparound consistently indicates low fidelity scores in the areas of transition,

natural supports, and community-based services and high scores in areas such as implementation, cultural competence, persistence, and family voice and choice (Bruns, 2010; Cox et al., 2009; Moore & Walton, 2013). These findings indicate a degree of consistency in both the prescribed elements and the overall delivery of wraparound in New Zealand compared to established wraparound processes in the USA (Bruns, 2010; Cox et al., 2009; Effland et al., 2011; Moore & Walton, 2013; Painter, 2012; J. S. Walker et al., 2012).

Of those studies which provide fidelity data for the phases of wraparound the transition phase appears most difficult to establish adherence to. In the validation study of the WFI-4, similar trends to the current study across phases were found, with the implementation phase having the highest fidelity rating and the transition phase the lowest (Bruns, 2010). M. A. Moore and Walton (2013) corroborated this finding of low fidelity to the transition phase in their study. Natural supports and community-based services have also been commented in the wraparound literature to be the most difficult to establish and connect with (Cox et al., 2009; Moore & Walton, 2013). In particular, the principle of natural supports has often been reported as the lowest scoring principle (Cox et al., 2009; Moore & Walton, 2013). Due to the low fidelity ratings of community-based services and natural supports, both of which are the long term support system for families and young people, it is therefore not surprising that the transition phase was also rated at below average fidelity.

A large part of the transition phase is around preparing families and young people to leave the formal wraparound process which involves transitioning the family to informal and natural supports within their community (Walker et al., 2004). Natural supports and community-based services provide families and young people with ongoing support to create a sense of safety and security after the wraparound process has ended (Bruns, Walker, et al., 2004). The transition phase is always hard for families as an intensive service is stepping out and there can be uncertainty and concerns regarding the future. However, if natural supports and community-based services

are not established and integrated into the family's life this can make transition even more difficult and is likely, as was the case in the current study, to lead to lower perceived adherence to this phase.

A potential reason for low fidelity to the principle of community-based services in the current study is the limited range of community-based services available in the area that wraparound is being delivered in New Zealand. The service delivering the process has indicated that in their operational and catchment area there are less community-based services available to them than in other areas. The limited range of community-based services has been an ongoing barrier and struggle for wraparound in New Zealand to establish a community network to support families and young people with high and complex mental health needs. The service providing the wraparound process is continuing to develop and form relationships with community agencies in the area and recognise this is an area for improvement.

In New Zealand, developing and including natural supports in the wraparound process has also been identified as a key challenge (Shailer et al., 2013). Many of the families who come into the wraparound process are isolated from their extended family and their communities meaning they have a limited natural support system. While one of the aims of the process is to enhance natural supports for families, this also requires the commitment of the family, youth, and team to identify, reach out, engage with, and bring on board natural supports from the family's extended family or community (Bruns & Walker, 2008). Unfortunately, families with natural supports may feel too ashamed about their situation to include them in the process (Dalder, 2006). Therefore, families' and young people's reluctance to share what could be viewed as personal family issues may have impacted or constrained the ability to include or increase natural supports in the wraparound process leading to the low fidelity to this principle (Dalder, 2006).

One strategy used by the wraparound process in the USA to increase the involvement of families' natural supports is the incorporation of 'family support partners' or 'peer counsellors' who are employed to support families (Miles,

2008a). These are individuals that have been through the wraparound process or mental health system and bring that perspective to the family and team (Miles, 2008a; Penn & Osher, 2008). By discussing their own experiences they can often help to normalise the need for, and inclusion of, natural supports for families who may be reluctant or concerned (Meyers & Miles, 2003). This peer support system is not yet available in New Zealand, but it is currently in the process of being advocated for, as it could potentially provide a bridge to helping families reach out to natural supports. However, due to the driving principle of family voice and choice in regards to their wraparound team, if families do not want extended family or other community members involved in their wraparound process this choice must be respected (Penn & Osher, 2008).

Individual Respondent Groups

Individual respondent groups of wraparound facilitators, caregivers, youth, and team members all confirmed the fidelity of the wraparound process. As was shown in this study, wraparound facilitators have consistently been evidenced to rate the fidelity to the wraparound process as high (Bruns, 2010; Painter, 2012). Previous research has also supported the finding that wraparound facilitators rate the fidelity significantly higher than other respondent groups (Bruns, 2010). The high fidelity ratings by wraparound facilitators is theorised to be at least partially due to the fact that they were rating their own delivery of service which may have led to an inflation of fidelity scores (Painter, 2012).

Inconsistent with previous findings, all respondent groups who received the wraparound process in New Zealand, namely caregivers, youth, and team members, perceived the delivery of the process relatively consistently. In research investigating wraparound fidelity, caregivers and team members have been found to report higher levels of fidelity than youth (Bruns, 2010; J. S. Walker et al., 2012). In the current study, no significant differences were found between the ratings of perceived fidelity between caregivers, youth, and team members.

In the sample, six youth did not

complete the WFI-4 as consent was not provided by the youth and/or caregiver. This was primarily because the young person declined to participate, was in crisis or was deemed by the caregiver to be too unwell or did not have the intellectual capacity to participate. An interesting finding was that when the wraparound facilitator, caregiver, and team member fidelity data for these six cases were removed a consistent perception of fidelity to the wraparound process was indicated across all four respondent groups. This insignificant finding could be due to the loss of statistical power to detect significant differences between respondent groups based on a reduced sample size (Field, 2013). Alternatively, a preferred explanation is that this finding suggests the variation in scores between wraparound facilitators, caregivers, and team members may have been due to the differences in fidelity ratings for these six youth. Consistent with this theory, studies investigating youth non-participation have suggested that youth who do not consent or participate in mental health research may represent a particular subset of clients (de Winter et al., 2005; Groves, Cialdini, & Couper, 1992; Noll, Zeller, Vannatta, Bukowski, & Davies, 1997). These youth may exhibit higher levels of psychopathology, lower cognitive ability, and maladjustment (de Winter et al., 2005; Noll et al., 1997). This could have impacted on respondents' perceived fidelity to the process and potentially led to artificially high fidelity scores for the youth respondent group without these six cases, and lowered fidelity scores for caregivers and team members with the inclusion of these six cases.

Limitations and Future Research

A number of limitations to this study should be noted. At the time this study was conducted only one service was delivering the wraparound process in New Zealand. This meant the current study involved only one self-selected service implementing the wraparound process which was well established. This may impact on the ability to generalise the current findings to other wraparound processes, in particular, to new wraparound processes which may be set up in New Zealand in the future. As wraparound processes which are considered to be in the later stages

of development, have been found to have higher levels of fidelity, than those in earlier stages of development (Effland et al., 2011). Future research could potentially investigate the fidelity between well established and newly formed wraparound processes in New Zealand. This research could help to identify mechanisms which could be put in place to quickly facilitate the delivery of high fidelity wraparound.

The clearest limitation in this study is the small sample size which may have impacted on the ability to detect significant effects in the analysis due to insufficient statistical power. In addition, since the sample was from the same service many of the families involved in this study also had the same wraparound facilitator, which increased the likelihood of confounded results and restricted the variance in fidelity scores (Bruns et al., 2005). Equally, as wraparound facilitators were serving more than one family involved in the study they completed the WFI-4 for each family they served, which could have led to additional inflation of the wraparound facilitators ratings of fidelity.

Participants in this study were a self-selected sample of those families who were willing and consented to be part of this research. As families self-selected to be part of this research they may not have been a representative sample of all families involved in the wraparound process and could have been more likely to be experiencing success through the process (Bruns et al., 2005; Olsen, 2008). The representativeness of the sample is particularly worthy to note regarding ethnicity. In the current study the sample was predominantly New Zealand European and could not be generalised based on ethnicity. Therefore, although high fidelity to the principle of cultural competence indicates great promise for this process in a New Zealand context, this result should be interpreted with caution as the current findings are unable to be generalised to those of different ethnicities. Future research studies in New Zealand should investigate this process and its fidelity with those of different ethnicities and cultures, in particular, for New Zealand Māori. This may also need to include an adaption of some questions in the WFI-4 to be more relevant to New Zealand

cultural values and beliefs, such as the integration or reflection of the principles from the Treaty of Waitangi, which are an integral part of New Zealand culture and in the delivery of culturally responsive interventions for Māori (Durie, 1989, 2011; Herbert, 2002).

Finally, it could be considered a limitation of this study that client outcomes were not evaluated. However, in the current study it was only aimed to establish whether and how well the wraparound process was being implemented in New Zealand. An advantage of solely focusing on fidelity was that multiple perspectives could be obtained on wraparound delivery. This allowed for a comprehensive understanding of the adherence to the wraparound process. Nevertheless, future research needs to be conducted regarding the outcomes of this process and its effectiveness as well as the relationship between outcomes and fidelity within this setting.

One difficulty in comparing fidelity ratings across studies which have used the WFI-4 is that different studies use different respondent forms to evaluate fidelity. Effland et al. (2011) used fidelity ratings only from the wraparound facilitator form while Walker et al. (2012) assessed the fidelity of the wraparound process using the caregiver and youth forms. Alternatively, Painter (2012) and Moore and Walton (2013) determined fidelity through the use of the caregiver, youth, and wraparound facilitator forms. The total fidelity score on the WFI-4 of a given wraparound process is determined by combining all respondent groups interviewed. However, each study has only used certain respondent groups to obtain their fidelity score. This makes it difficult to directly and accurately compare the fidelity of the wraparound process across studies; especially considering that most published studies only report the total fidelity score for combined respondents (Effland et al., 2011; M. A. Moore & Walton, 2013; Painter, 2012; Walker et al., 2012). Future research could potentially consider standardising the use of all forms to allow for accurate comparisons between the implementation of wraparound in different areas.

Implications and Conclusions

The findings from this study aid in understanding how Wraparound is being delivered within a New Zealand context from both a consumer and delivery perspective. It provides an initial model of adherence for the wraparound process which may act as a baseline for future studies. It is also the first step in beginning to establish an evidence base for the use of the wraparound process in New Zealand.

While, the results indicated that the wraparound process is being delivered as it was intended and adhering closely to its practice model, there were areas of relative strength and areas for improvement. The principles which were rated with high fidelity were those which the wraparound facilitator or service had some direct impact or control over such as providing a culturally competent service, working collaboratively, persisting with service delivery, and giving young people and families a voice and choice. Low fidelity aspects of the model included the transition phase, natural supports, and community-based services which appear to be consistent with other wraparound sites in the USA (Bruns, 2010; Cox et al., 2009; Moore & Walton, 2013). Although consistent with the wraparound fidelity literature these findings support the need for greater community and natural supports involvement in New Zealand. This may include continued relationships being formed with community agencies and the introduction of formal or informal peer support consistent with 'family support partners' used in the USA (Miles, 2008a). Such peer support may be a valuable inclusion to the wraparound process in New Zealand to increase fidelity to the principle of natural supports as these individuals have faced similar issues and are familiar with the wraparound process (Miles, 2008a; Penn & Osher, 2008). They would bring first-hand experience of the usefulness of natural supports within the community and understand the personal challenge of reaching out to friends and families. Providing peer support may help to increase family's willingness to access and include natural supports in their wraparound process and lives (Meyers & Miles, 2003; Penn & Osher, 2008).

The findings of the current study clearly indicate the need for more research on the wraparound process within a New Zealand context. Continued research should be conducted on the fidelity of the process which employs a larger, more culturally diverse sample, and includes outcomes in their investigation. Future studies should also include data from more than one wraparound site (whether from New Zealand or overseas) so that relationships between populations served, processes, fidelity, and outcomes can be explored.

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Ko tēhea te ara tika? A discourse analysis of Māori experience in the criminal justice system

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The criminal justice system in Aotearoa, New Zealand has a dispiriting history of interactions with Māori, a backdrop against which to understand contemporary Māori experiences of institutional racism. The research aims to provide an examination of Māori lived experiences of the criminal justice system. Participants were five Māori adults who were interviewed about their experiences with criminal justice institutions. As Kaupapa Māori research, undertaken alongside a discursive psychology framework, the study sought to acknowledge and explore Māori narratives and experiences of racism. From the analysis emerged four recurring discursive resources; blatant racism, Māori and Pākehā identities, Māori as trapped in the criminal justice system, and Māori identity and culture as strength. Participants' perspectives of the criminal justice system reveal that prevailing power relations facilitate the belittling of Māori identity, intrude on Māori rights, and diminish cultural integrity. Institutional racism is constructed as enduring and shaped by notions of Māori cultural inferiority. Arguments for an alternative Māori criminal justice system are discussed.

Traditionally, within tikanga Māori (Māori custom) there existed a Māori system of law, order, and justice that was fully integrated into everyday life (Pratt, 1992). Tikanga Māori was inseparable from spirituality, which facilitated a high level of social control and discipline within Māori society (Pere, 1997). Customary Māori conceptualisations of law and justice are briefly summarised; a spiritual transgression occurred (breach of tapu), which affected the prestige and authority (mana) of a person, hapū (sub-tribe), or iwi (tribe). Recompense was obtained through some form of reciprocal response (utu) in order to restore balance to the community (whakahoki mauri) (Paterson, 1992; Pere, 1997; Workman, 2014). Importantly, judicial practices prioritised victims' healing and offenders' reintegration (Quince, 2007).

Te Tiriti o Waitangi, signed on the 6 February 1840, came as a declaration that Aotearoa, New Zealand was a British colony. It is the founding document of New Zealand and a symbol of unity between Māori and Pākehā (Barlow, 1991). Despite the terms of Te Tiriti o Waitangi, colonisation has led to the suppression and exclusion of Māori legal practices (Pratt, 1992). State agencies imposed Pākehā justice over Māori and a barrage of assimilation policies resulted in marginalisation and cultural destruction (Webb, 2009). Throughout the process of colonisation Māori have had minimal political power against an increasingly powerful colonial state (Bull, 2004). Successive governments have privileged their own interpretations of Te Tiriti o Waitangi and denied Māori rights to uphold traditional systems of law and justice (Tauri, 2005).

Following the Second World War, in the context of consecutive governments having implemented economic and land use policies to the detriment of Māori, urbanisation saw a huge proportion of the Māori population shift from rural to urban centres. In 1945, 75 per cent of Māori lived in rural areas, which reduced to 18 per cent by 1991 (Walker, 2004). Urbanisation entailed the disintegration of Māori social and cultural underpinnings that had a disruptive psychological ripple effect (Jackson, 1988). Long-standing issues of poor socioeconomic conditions, disconnection from culture, and diminishing self-respect all contribute to 'trapped lifestyles' of Māori offending and imprisonment (Durie, 2003).

There has been an increasing trend in recorded offending by Māori since the beginning of the twentieth century, primarily due to growing government surveillance and the use of legislation to facilitate over-policing of Māori (Bull, 2004). Māori are dissatisfied with the criminal justice system in Aotearoa, New Zealand (Quince, 2007). This dissatisfaction is manifest in a recent submission to the Waitangi Tribunal, the Department of Corrections and Reoffending Prisoners Claim (Wai 2540). The claim alleges that the Crown has breached Te Tiriti o Waitangi in failing to establish lasting commitments to reduce the number of Māori serving sentences and to reduce reoffending by Māori. The claim also contends that the Crown has failed as it has not engaged with Māori at a strategic level and there are no specific strategies to address re-offending (Waitangi Tribunal, 2015).

Institutional racism is an insidious form of racism and those who perpetrate it tend to deny its existence (Blagg, 2008). The criminal justice system and the broader social context in which it is situated in Aotearoa, New Zealand, reproduces institutional racism throughout its structures. The foundations of the criminal justice system are monocultural, impacting on Māori in particular ways, and giving rise to a tradition of bitter experiences (Jackson, 1988). A recent United Nations Working Group on Arbitrary Detention reported systemic bias against Māori at all levels of the criminal justice system and recommend a review be undertaken (United Nations, 2014).

Māori feature in disproportionately high numbers throughout the criminal justice system, from policing, to conviction, to imprisonment and probation. Māori comprise 15 per cent of the general population, however make up; 42 per cent of all Police apprehensions, 43 per cent of all convictions, 51 per cent of all imprisonments, with Māori

women accounting for 60 per cent of the female prison population (Department of Corrections, 2007). With Māori continuing to comprise nearly 51 per cent of the prison population, it is important to also note the significant rise in the overall prison population in the past twenty years (Just Speak, 2014). The Department of Corrections indicates that high numbers of Māori in offending statistics are paralleled by high numbers of Māori as victims of crime. In addition, there is a higher level of recidivism for Māori prisoners than non-Māori and in a study involving 129 Māori male prisoners, 48 per cent of the men surveyed were serving their fourth or subsequent prison sentence (Gordon & MacGibbon, 2011).

Māori children are over twice as likely to have Police contact than Pākehā children with the same history of offending behaviours (Fergusson, Horwood, & Lynskey, 1993a). Young Māori adults are also at increased risk of conviction compared to their non-Maori counterparts with identical social backgrounds and self-reported history of offending (Fergusson, Horwood, & Swain-Campbell, 2003). Ethnicity alone is not a strong predictor of early offending (Fergusson, Horwood, & Lynskey, 1993b) and evidence indicates that even when controlling for social, economic, and related factors ethnic differences in offending rates reduce, but are not eliminated (Marie, Fergusson, & Boden, 2009).

The Indigenous peoples of Australia are described as being amongst the most imprisoned people in the world (Blagg, 2008). Australian Indigenous youths are over 15 times more likely to be in juvenile detention centres than non-Indigenous youths, despite their self-reported offending being only two times greater (Cunneen, 2006). Likewise, the Indigenous peoples of Canada have high rates of crime and victimisation (Wood & Griffiths, 2000) which are explained in terms of cultural conflict between Indigenous peoples and non-Indigenous society, and failure of the criminal justice system in its dealings with Indigenous peoples (LaPrairie, 1997). Indeed historical and structural conditions of colonisation, social and economic marginalisation, and institutional racism are key to conceptualising contemporary Indigenous experiences with criminal justice systems (Cunneen, 2006).

Alternative approaches to the study of racism have grown in response to the changing appearance of racism; modern forms of racism are subtle and delicately deployed, enabling social acceptance (Augoustinos, Tuffin, & Rapley, 1999; Tuffin, 2008). Discursive research is concerned with the ways society gives voice to racism, the role of discourse in creating and reproducing social formations (Wetherell & Potter, 1992) and the shaping of language in certain contexts to legitimate the blaming of Indigenous or minority groups (Potter, 1996).

Seminal discursive research on the language of racism (Wetherell & Potter, 1992) focused on the discourse of Pākehā regarding ethnic relations with Māori. This work suggested the 'culture' discourse highlights naturally occurring differences and is a form of self-sufficient explanation that accounts for Māori 'fatal flaws' as within traditional practices, attitudes, and values. Through the advocacy of respect and tolerance for difference, the 'culture' discourse masks colonialism, power relations, and exploitation with a narrative of clashing cultures. The use of discourse in practical ways to account for ethnic tension appeals to common sense and in so doing maintains and normalises Pākehā position of power (Nairn & McCreanor, 1990). A 'standard story' emerges, as a common sense way of understanding and talking about ethnic relations, which enables certain positioning of Māori, such as 'good' and 'bad' (Nairn & McCreanor, 1991). By appealing to common sense and what is widely accepted among dominant groups, the standard story functions to mask the ethnic and cultural aspects of power structures, maintaining oppressive social relations. Similar discursive research has been conducted in Australia (Augoustinos et al., 1999) and race talk was occasioned, variable, flexibly deployed, and entrenched with a discourse of colonial superiority and domination. Furthermore, the creation of a cultural hierarchy was central to the covert and subtle nature of modern racism, and discourses enabling justification and legitimation of oppression have been observed as internationally pervasive.

There is a substantial amount of discursive work documenting oppressive

talk that renders Māori rights illegitimate (Tuffin, 2008). Privileging and legitimating Māori understandings can develop an alternative story of Māori and Pākehā relations and reverse standard power relationships (Tuffin, Praat, & Frewin, 2004). Moreover, alternatives to the standard story enable empowering subject positions and argumentative resources, in terms of discrimination and ethnic rights, that can be taken up by Pākehā to endorse Māori rights (Kirkwood, Liu, & Wetherall, 2005).

While there is a body of critical literature exploring the language of racism there are few studies that consider Indigenous peoples' perspectives and the function of their talk in accounting for racism. Indeed, perspectives of targets of racism remain largely unexplored, producing a narrative of race talk that is detached from the lived experiences of the victims of racism (Pack, Tuffin, & Lyons, 2015). There are calls for research to analyse the subject positions and arguments taken up by Indigenous peoples when commenting on discrimination and legitimating Indigenous rights (Kirkwood et al., 2005). Pack et al. sought to redress the imbalance by examining the ways in which Māori account for racism. A point of contrast in the study is Māori reports of blatant and offensive racism. Likewise, daily life for the Koori Aboriginal people of Australia was constructed as tainted by racism, and much of the racism experienced, both verbal and behaviour, was categorically blatant (Mellor, 2003).

Through considering and respecting perspectives of Indigenous peoples, there is growing awareness of the experiences of racism and this underpins the aims of the current study. Specifically, this study aimed to examine Māori experiences of institutional racism within the criminal justice system in Aotearoa, New Zealand, with the analytic focus being on how participants accounted for such experiences.

Method

The study was guided by Kaupapa Māori and discursive psychology research methods. Kaupapa Māori is founded within an inherently Māori epistemology (Henry & Pene, 2001). Kaupapa Māori research occurs with and alongside Māori, to retrieve space for Māori

voices and stories to be heard (Tuhiwai Smith, 2012) and   is characterised as; culturally safe, relevant and appropriate research, guided by kaumātua (elders), and undertaken by Māori (Irwin, 1992). Discursive psychology is located within a social constructionist epistemology and challenges traditional taken-for-granted approaches in psychology (Tuffin, 2005).

Taking place in a major city in Aotearoa, New Zealand, in accordance with Kaupapa Māori research principles, consultation occurred in the early stages of the research project with a Māori service provider who is a subsidiary of the local rūnaka (Māori tribal council) (Bishop, 1998; Tuhiwai Smith, 1999). Consultations also occurred with a kaumātua about the project foundations, aims, and methods (Walker, Eketone & Gibbs, 2006). Both the service provider and kaumātua have experience working alongside the criminal justice system. The study conformed to the requirements of the University Ethics committee and was conducted with the approval of that body.

Criteria for participation were identification as Māori and having had experience with the criminal justice system. Involvement with the criminal justice system was defined as having been arrested and, or charged with a criminal offence by the Police, being tried and, or convicted and sentenced in the Courts, or having been imprisoned and, or subject to a community-based sentence. Recruitment took place via the Māori service provider and another community counselling service. There were five participants, four male and one female, and they chose the names they wished to be identified by. Individual interviews took place in the office of the service provider, participants' homes, or places of work outside of working hours and audio was digitally recorded. The Kaupapa Māori research principles of tikanga, whakapapa (genealogy/connection), whānau (family), and Te Reo Māori were threaded throughout the interview process. As Tuhiwai Smith (1999) asserts, tikanga is concerned with being able to navigate and clearly interpret contexts regulated by Māori values. During interviews whakapapa was intertwined with the principle of whānau in the form of whakawhanaungatanga (establishing relationships), whereby

introducing oneself in the context of whakapapa is both culturally meaningful and integral to the process of forming relationships. The principle of Te Reo Māori relates to the appropriate use of the Māori language throughout interviews (Bishop, 1999; Tuhiwai Smith, 1999). Interviews were loosely structured around topics, including; participants' initial and overall experiences, their interpretations of their treatment as Māori, and their understandings and experiences of institutional racism. Interviews were transcribed verbatim using the conventions of standard orthography.

Analysis involved loose readings of the text, identification of relevant extracts and preliminary coding, followed by discrete coding, whereby data was carefully organised in to categories. A cyclical process of coding (Potter & Weatherell, 1995) was used entailing numerous readings and categorisations, followed by re-reading and occasioned re-categorisations. The action orientation of discursive psychology proposes that racism is pervasively embedded in language and the categories, groupings, identities, and evaluations involved in racism occur in and through language (Tuffin, 2005). Therefore, the analysis noted clusters of terms, descriptions, and figures of speech commonly organised around metaphors or imagery, referred to as interpretive repertoires, linguistic resources or discursive resources (Potter & Weatherell, 1995). In this way the analysis sought to robustly detail the constructed and constructive patterns of race talk.

Analysis

From the analysis emerged four recurring discursive resources, which framed Māori experiences of institutional racism within the criminal justice system. These were, blatant racism, Māori and Pākehā identities, Māori as trapped in the criminal justice system, and Māori identity and culture as strength.

Blatant racism

Blatant racism, also termed old-fashioned racism, draws on notions of racial superiority (Augoustinos et al., 1999). Constructions centred on accounts of being subjected to, or witnessing

verbal and physical abuse from staff in criminal justice institutions. The following extract identifies a case of blatant racism.

> Dain: *[A North Island prison is] definitely, um, if you're black, get back [...] they punched me up in the toilets, smacked me up, handcuffed me up.*
>
> I: *Officers?*
>
> Dain: *Punched me over, yea [...] I've had a, um, he still works in the prison service now, a screw [in a South Island city], give me a couple of punches in the head and stuff, when I was like 17.*

Dain frames physical abuse from Corrections' officers as traceable to racism and that being "black" is cause to be a target. The phrase "if you're black, get back" is a warning that suggests he and other Māori in prison were to expect difficulties. By naming specific locations, he strengthens his construction of blatant racism as widespread. Also, in detailing a specific officer (screw) who assaulted him 20 years ago and continues to work at the prison, he builds an account of racism as long-standing and unresolved. By implication the abusive officer has had a sustained career, which alludes to how this kind of blatant racism is able to survive.

In the following account Adam unambiguously constructs racism as accepted within criminal justice institutions. At the same time he illustrates denial by Pākehā of the existence of explicit racism in criminal justice institutions.

> Adam: *And when I talk to people that I know and Pākehās that I know, they, they can't understand the stories that I tell them, they, they just don't believe some of them, you don't get pulled over for no reason, this doesn't happen, you must have been doing something, you weren't there mate, you don't know. But, you see these things first hand and it exists. And it's also strange too, it's not just Pākehā officers having problems against Māori, it's Māori officers having problems against Māori as well, and I've seen them acting just as hard, if not harder against them, because maybe from a*

Police officer's perspective they've become ingrained, that this is the norm, and if you wanna [sic] fit in to the Police office then you better get on board with this [...] it just perpetuates the whole thing that Māori bad, Pākehā not bad, and it's been a perspective that has lived with me for a long time.

Adam's talk deals with the Police, rather than with Corrections, and the discursive work here lays out denial strategies used by Pākehā, as accusations are made of Adam, "you must have been doing something", to downplay the racism experienced. Adam's talk demonstrates that accounts of blatant racism are not believed by Pākehā, "they can't understand" and "don't believe" there is racism against Māori, and therefore they are unwilling to accept its existence. Indeed, the denial and discounting of racism by dominant groups is a prevailing feature of modern racism, particularly at institutional levels (Augoustinos et al., 1999). However, Adam definitively constructs racism as existing within criminal justice institutions. His account shapes a situation wherein it is criminal justice institutions versus Māori, which is "ingrained" and "the norm." Moreover, Māori officers are seen as involved in discriminatory treatment in order to fit in to the culture of the institution. Blatant racism within the criminal justice system is constructed as denied by the Pākehā public, accepted and normal within the institutions, as perpetuating ideas of "Māori bad, Pākehā not bad", and as having an enduring impact on Adam, "it's been a perspective that has lived with me for a long time."

Māori and Pākehā identities

A second discursive resource that emerged from participants' talk centred on identities, which manifested in two forms; Māori identity as lesser and Pākehā identity as better, or as Adam put it "Māori bad, Pākehā not bad." This discursive resource aligns with notions of cultural hierarchy (Augoustinos et al., 1999), a covert facet of modern racism, and the asymmetry positions Māori and Pākehā in opposition to each other.

Participants commonly constructed a dichotomy between Māori and Pākehā and that activities in prison associated with Māori identity were vetoed. In an account by Mickey, activities embracing a Māori identity are not only prohibited, but punished.

> Mickey: *Oh, you're treated like shit in jail, by Corrections. Like you can't sit, if you sit around a table and speak Te Reo Māori at a table, then straight away you're instigating something, or planning something, or plotting something. Um, it's real frowned upon to like, can't sing waiatas or, they won't let you do it, but yet you can sit in the wing and play the guitar and, or turn your stereo up and listen to heavy metal, or whatever, but you can't sit around with a guitar and sing waiatas, not even allowed to hakas in the wing, not even allowed to do hakas in your cell, um, so it's shit. They take, they try and strip any um, any rights of you, um, being Māori full stop, when you go in to, it's their way, or no way. It's their way or you go to a pound, sit down in the pound for being disruptive or, so, it's not good.*

Mickey's account constructs Māori identity as inherently connected with illicit activities; to speak Te Reo Māori arouses suspicion and equates to "instigating", "planning" or "plotting." Key aspects of Māori culture, namely Te Reo Māori, waiata (song) and haka are prohibited, and this is contrasted with non-Māori activities that are permissible, such as listening to music and playing the guitar. In this way the expression of Māori identity is regarded with intense suspicion and forbidden. To be Māori in prison means to be belittled and disrespected, "treated like shit", and prohibited from expressing a Māori identity. The image of a cultural hierarchy is reinvoked, though taken one step further as Māori culture is not only situated as lesser than Pākehā culture, it is something to be denied, as they "try and strip" "rights" of being Māori, "it's their way", that is the Pākehā way, or otherwise punishment. Importantly, Mickey constructs expression of Māori culture and identity as "rights", which does substantial discursive work in terms of framing the actions of Corrections' staff as breaching his social and cultural freedoms as a Māori.

Participants overwhelmingly agreed that being Māori equated to being treated differently by the criminal justice system. Following, Dain considers his experiences as a Māori dealing with the criminal justice system and connects this to general negative life experiences.

> Dain: *Um, it's quite hard to, I suppose, I don't really know, yea. I suppose, if I, yea, if I knew I'd be straight out with it, but um, I reckon there'd be some incidences where I've been to Court and, like I said, you know I had a rap sheet, that's x amount long and, and they'd just chuck the book at me, and um, I reckon I probably would've had a better life if I was white [laughs] you know, [clears throat] but, you know, who knows, can't really say, I don't think, just off, um, oh yea, na, I reckon I probably have had a hard deal aye, given to me yea, over the last, over, over a period of time, yea just by certain Judges, seen me as being a Māori, won't change, you know, yea, so probably, yea, yea I do.*

This excerpt exemplifies the difficulty in pinpointing institutional racism and experiences of it within the criminal justice system for Māori. Dain repeatedly shifts back and forth from finding institutional racism "hard to" identify, to not knowing, to assuring that if he did know he would be "straight out with it", to identifying some experiences during Court proceedings where he has been treated with a heavy hand, but then discounts institutional racism in these instances based on his criminal history (rap sheet). He concludes, "I probably would've had a better life if I was white", and in doing so constructs that not only are experiences within the criminal justice system worse for Māori and better for Pākehā, but that life in general is worse for Māori and better for Pākehā. He builds an account of having a "hard deal" done and having the Judiciary sentence him harshly, "chuck the book", and this is connected with broader constructions of Māori not being offered options of rehabilitation, as Māori "won't change".

In the next extract from Adam the idea of Māori being diverted away from rehabilitation is reiterated. He also emphasises differences in experiences of Māori and Pākehā with criminal justice institutions, explicitly constructing treatment for Pākehā as far better than that which Māori experience.

Adam: *There's a difference. If you're Pākehā and middle-class, you will be treated well and within all aspects of the law, and Police will endeavour not to charge you. If you're Māori Police will go out of their way to charge you, and they will charge you at a young age [...] they want to accumulate the charges against young Māori to make it easier to put them in to jail when they get to an older age, because they assume that once a young Māori starts offending, rather than trying a rehabilitation process, they go, stuff tryna [sic] fix them, let's just keep slamming charges on them until they hit 18, 19, and they've got four or five criminal appearances against them, boom, now this guy can be thrown in to jail. And that really seems to be my perspective on how they treat young Māori, in particular.*

Police treatment of Pākehā is constructed as fair, though partial for the benefit of Pākehā, in that there is an avoidance of charging them. In contrast, treatment of Māori is framed as discriminatory. Accusations of institutional racism are launched against Police who "go out of their way" to charge young Māori in order to provide the necessary conditions for imprisonment when they reach adulthood. Adam proceeds with claims that the criminal justice system is set on incarcerating Māori and dismissive of a rehabilitative approach.

Māori as trapped in the criminal justice system

A third recurring discursive resource used by participants was Māori as trapped in the criminal justice system. The term 'trapped' draws on the ideas of Durie (2003) that trapped lifestyles of risk, marginalisation, and poor social outcomes are forerunners to Māori offending and imprisonment; for many there is no escape from trapped lifestyles. Māori as trapped in the criminal justice system links with constructions of Māori as subject to discriminatory targeting whereby Maori are arrested, charged, and imprisoned at young ages. Indeed, a similarity shared by participants was that they all had contact with Police as

children, one as young as four years old, for 'criminal' behaviour.

Early encounters for participants with criminal justice institutions were not limited to Police; they were faced with the breadth of the criminal justice system at young ages. Grace shapes her experiences with Courts, probation, and prison as "frustrating" in the next extract.

Grace: *Um, frustrating, very muchly. Um, with probation, I didn't feel like I had a very good probation officer like, they didn't, I, I never got other options, um, when I went to Court as an adult, like District Court, I didn't get a community sentence, and I'd never been on a community sentence, like they didn't give me the opportunity to do PD or anything like that, and being 17 as well, it was just prison straight away, so I didn't, um, I went in while I was on remand, and, um, just the whole, also with the probation officer I had at that time, made a lot of comments about, um, what people say were stereotypes of Māori, like, oh well it's probably best thing you get locked up, cause that's what you guys do, and, oh, it's hard to say what exactly was said at that time, but to me, I know there were comments mentioned and I saw it as stereotype racism sort of thing.*

Grace organises her account to situate responsibility with probation, particularly with the probation officer, for aiding her imprisonment. While she initially constructs her treatment as an "adult", this is disputed by later details of her youth, being a 17 year old at the time. Grace builds an account of injustice, repeating four times the lack of sentencing options made available to her, "I never got other options", "I didn't get a community sentence", "I'd never been on a community sentence" and "they didn't give me the opportunity to do PD or anything like that." Noting her age and constructing prison as imminent then reinforced this sense of injustice. Graces' detailing of explicitly racist remarks made by the probation officer is consistent with blatant racism and builds on accusations that it was always the intention to have her imprisoned, because that was the "best thing" for her and for Māori in general. Interestingly, community-

based sentences are constructed as an "opportunity" and are viewed as a positive alternative to counteract being trapped in prison. The idea of the criminal justice system being intent on imprisoning Māori again emerges and being trapped in the criminal justice system is constructed as ever-present for Māori. Next Adam constructs Māori as not only being trapped by criminal justice institutions, but also by themselves.

Adam: *I met some of Liam's friends that came out as well, and you can just tell, they were a one way ticket back in to jail [...] So, once they get locked in to the system, it's really hard to drag themselves out, and it's, it's not just the Police, or the, or the, the um, Corrections establishment in their bias, but it's their own internal bias that they build up amongst themselves. They just think, oh this is the way it is for me, and they just end up in the treadmill. I had a friend who went in to jail when he was 16, didn't get out until his late thirties, and just, he was just on this treadmill where he just couldn't get out of that system, so, yea.*

By referring to others as, "a one way ticket back in to jail", Adam constructs their re-imprisonment as pending and unavoidable. Also, by using the extreme case formulation "really", he emphasises the difficulties entailed in unshackling from being "locked in to" the criminal justice system, that "it's really hard to drag themselves out." Adam locates accountability with both the criminal justice institutions and Māori for remaining trapped; by his account it is both institutional and personal at a psychological level for Māori, as he positions Māori as passive, "they just end up on the treadmill." The metaphor of journeying is stagnant on "this treadmill", and through this discursive work he creates a potent image of movement, without progress.

Māori identity and culture as strength

While Māori identity is constructed as institutionally targeted by criminal justice institutions, it also emerged that there existed strength within Māori identity and connection to Māori culture.

Identity and culture were shaped as sites from which participants drew resilience. In the following extract, Wayne illustrates the importance of connection to culture, using a Māori proverb.

> Wayne: *But, I, I, I made that resolution not to, to go back, it's, it's what is it, he kapiti hono, he tātai hono. And there's another one but I can't remember it, but it's like, I have to stay connected, you know, to something.*

"He kapiti hono, he tātai hono" translates to, 'that which is joined together becomes an unbroken line' and is used to affirm a spiritual joining between the present and ancestral links (Mead & Grove, 2001). Wayne's use of Te Reo Māori and referencing of a traditional saying does significant discursive work in highlighting the importance of social connections. His connection to this is constructed as strengthening his resolve and determination to counteract going "back" to prison.

In the next extract Mickey builds an account of connection to a Māori service provider as a strength.

> Mickey: *I don't view, working with [the Māori service provider], I don't view it as being on parole, or being a chore, you know I don't view it as something I have to do, I, you know I enjoy coming, and working with [them] because you get that whole Māori vibe, you know like, it's good, it's relaxed, it's not, oh yep you have to be here at this time, you gotta [sic] leave at this time cause I've got another appointment, um, and that's probably the only reason why I'm not back in jail now, cause of the support from, and the interventions that [the Māori service provider] do, to ensure that you know, you're doing what you need to do and you've got the support to do what you need to do. Feel comfortable like, cause normally I wouldn't even ask people for, if I'm struggling I'd just keep struggling by myself, but through [the Māori service provider], you don't, it's good, you don't have to worry about things like that, cause you just feel part of the whānau here, so, it's good.*

Mickey constructs working with this Māori agency as positive, but in the broader picture shapes working within a Māori framework as not only enjoyable, but also facilitative to him staying out of prison. Indeed, he identifies it as "probably the only reason" he hasn't been reimprisoned. The Māori approach, or "whole Māori vibe", is shaped as strikingly different to working with criminal justice institutions, which is "a chore." He builds an account of reciprocal relationships; the Māori service provider is "relaxed" and supportive toward him, so he in turn responds positively and feels "comfortable" with them. Whereas probation is constructed as time-constrained and rigid, "you have to be here at this time, you gotta [sic] leave at this time cause I've got another appointment." His account marshals explanations for his relative success as being the result of connecting to Māori culture and feeling "part of the whānau." Mickey's talk here is symbolic of the Māori notion whanaugatanga, a relationship that is reinforcing and provides individuals with a sense of belonging (Moorfield, 2016).

Discussion & Conclusion

Though much of the discursive research on racism considers that modern forms of racist talk are subtle (Augoustinos et al., 1999; Tuffin, 2008) participants used the discursive resource of blatant racism to shape racist speech and acts as long-standing, normalised, and prevailing in verbal and physical abuse. Considered alongside previous research focussing on the perspectives of targets of racism (Mellor, 2003; Pack et al., 2015) there is sufficient argument to contradict the suggestion of modern race talk as characteristically subtle and delicate. Modern racism may indeed present as such within Pākehā or non-Indigenous talk, however within Indigenous peoples' talk, constructions of old-fashioned, blatant racism are ever-present.

The discursive resource of Māori and Pākehā identities was one way that racism operated implicitly and the metaphor of a cultural hierarchy was pervasive (Augoustinos et al., 1999). This was evident in the subjugation of Māori culture and the rejection of the expression of Māori identity in Te Reo Māori, waiata, and haka. The discursive resource of superiority (Pack et al., 2015) situates racism as emanating from Pākehā assumptions of Māori inferiority and this was mirrored in the representations of Māori identity as linked to criminality and illicit behaviour, further reinforcing the disadvantaged position of Māori. The effect of racism on Māori identity creates a sense of inferiority, of being 'other' (Te Hiwi, 2007). The experience of 'othering' was sinuous, displayed in blatant and implicit forms of racism, and served as demeaning of Māori identity. Māori as 'other' was clear in the dichotomy constructed between Māori and Pākehā identities; "Māori bad, Pākehā not bad", exemplifies positioning which contributes to the standard story (Nairn & McCreanor, 1991). The standard story of Māori as bad and beyond help is self-sufficient, in light of prevailing constructions of Māori as over-represented in the criminal justice system. Furthermore, treatment of Māori within the criminal justice system resonates with the culture discourse (Wetherell & Potter, 1992), which frames Māori involved with the criminal justice system as both deficient relative to Pākehā and deficient as Māori.

Trapped lifestyles, including offending and imprisonment, present little hope or opportunity for escape (Durie, 2003). Similar to the Koori Aboriginal people of Australia (Mellor, 2003) Māori were framed as having no place in culturally superior society, that the place for Māori was away from general society and in prisons. The potent image of a treadmill was created and denoted movement, yet with little gains and progress for Māori. In effect, Māori as trapped functioned to voice Māori sense of passivity and hopelessness within oppressive power structures.

While Māori identity was regarded as a site of struggle, it was also constructed as a site of strength and hope. Connection to Māori culture and identity was viewed as preventative to further criminality. In this way it functioned as a form of resistance to the cultural hierarchy that devalued being Māori and challenged the standard story that equated Māori identity with badness. Kirkwood et al. (2005) assert that a fundamental argument against the standard story of Māori and Pākehā relations is acknowledgement of the ongoing nature of colonisation.

Colonising practices were evident throughout the criminal justice system; the discriminatory targeting of Māori by Police, the inequitable treatment of Māori by the Judiciary and Corrections, the disrespect of Māori identity within prisons, and the general positioning of Māori culture and identity as inferior. In claiming Māori culture and identity as strengths, Māori are positioned as resisting the perpetuation of such colonising practices.

Māori as targeted and subject to discriminatory treatment by criminal justice institutions is a common finding throughout the literature (Fergusson et al., 1993a, 1993b; Jackson, 1988). It is suggested that there is a cycle of bias; greater Police contact with Māori influences public perception of Māori as 'criminals', which in turn maintains higher rates of Police contact with Māori. This cycle is evident in participants' experiences of early initiations into criminal justice institutions and constructions of Māori identity as constantly in conflict with the criminal justice system. The experiences of participants also align with evidence indicating strong signs of intergenerational recidivism amongst Māori (Gordon & MacGibbon, 2011).

Despite bias and social background, Māori have been found to be at higher risk of offending (Fergusson et al., 1993a; Fergusson et al., 2003). The dominant discourse persists in fabricating explanations of Māori predisposition to antisocial behaviour and crime, such as the 'warrior gene' hypothesis (Hook, 2009), however Māori rates in offending better reflect the vast and profound impact of a history of colonialism (Quince, 2007). The positioning of Māori as culturally inferior and the denigration of Māori identity aligns with the ideas of Quince, that the contemporary social, economic, cultural, and political positions of Māori are related to the processes of colonisation, such that offending by Māori is connected to Māori identity. Perpetual colonialist discourses are central to problematizing Māori, and international literature emphasises similar experiences for Indigenous peoples of Australia and Canada (Blagg, 2008; Fleras & Elliott, 1992). Fleras and Elliot advocate for a shift away from situating the 'problem' with Indigenous peoples

and argue that the issues sit instead in the interactions between Indigenous peoples, culture, and colonialism. Undeniably the tradition has been to interpret Māori offending as solely representative of Māori criminality. However, as well as being manifestations of colonialism, Māori offending is indicative of the relationships shared with criminal justice institutions (O'Malley, 1973).

Tauri (2005) contends that the imposed criminal justice systems for Māori and Indigenous peoples of Australia and Canada alike are inappropriate for dealing with offending by Indigenous peoples and have influenced high levels of offending, victimisation, and imprisonment. Justice for Māori is argued as unrealistic in a criminal justice system that is established on non-Māori philosophies, culture, and values and a move toward a Māori criminal justice system, embedded within a Māori worldview, is a means to address Māori dissatisfaction with the current system (Jackson, 1988; Tauri, 2005). On a small scale, the dire effects of the criminal justice system for Māori may be mitigated by ensuring policy respects tikanga Māori in implementation and design (Just Speak, 2012). However, Workman (2014) also advocates for a meaningful shift away from the prevailing paradigm to an approach based on traditional tikanga Māori, with a fundamental role for whānau. The focus therein would be on the concept of whakahoki mauri, which would necessitate that the efforts of the criminal justice system be directed toward restoring peace and balance within the whānau and wider community to improve social integration for Māori who have offended. Whakahoki mauri embodied in this way would reinstate the traditional meaning of rehabilitation, to help to reform an individual's ability and capacity to participate fully in society (Workman, 2014). Alternative specialist courts have been established and there are 14 marae-based Rangatahi Courts throughout the country that are designed to target Māori youth by incorporating elements of tikanga Māori (Youth Court of New Zealand, 2017). Rangatahi Courts are a first step toward what essentially need to be wide ranging, multi-sector, government, and community strategies to deal with the issue of Māori involvement with the criminal justice system (Just

Speak, 2014). Within the education system Kaupapa Māori approaches and institutions are well established (Smith, 2002), therefore a Māori criminal justice system is feasible .

The findings of this research contribute to the body of discursive psychology literature mapping the language of racism. Specifically, this study responds to calls for research that investigate the perspectives of Māori as targets of racism (Pack et al., 2015). However, perhaps more importantly, the study aligns with ideas that research and approaches regarding institutional racism and Māori representation in the criminal justice system need to be varied and comprehensive (Just Speak, 2012, 2014). Furthermore, as Kaupapa Māori research there has been a deliberate focus on Māori strengths and resources, legitimating tikanga Māori and traditional ideas regarding law and justice. A limitation of the study may be its small scale, however this is regarded as appropriate for an exploratory local study and the partiality this entails is acknowledged.

Māori perspectives of the criminal justice system and institutional racism draw attention to pervasive power relations, which enable the denigration of Māori identity, intrude on Māori rights, and diminish cultural integrity. At a broader social level the findings lend weight to arguments that colonialism has enduring effects for colonised peoples. The significance of Māori experiences with the criminal justice system in Aotearoa, New Zealand cannot be denied. This study has implications for future research to robustly explore institutional racism within the criminal justice system, to develop a fuller picture of the tension Māori experience, and to consider further approaches to addressing such issues. In light of increasing Māori dissatisfaction with the status quo, the arguments for restoring traditional Māori practices are mounting.

Glossary

haka	cultural / ceremonial dance
hapū	sub-tribe
iwi	tribe
kaumātua	elder
mana	prestige / authority
rūnaka	tribal council
tapu	restricted / sacred / prohibited
tikanga Māori	Māori custom
tino rangatiratanga	self-determination
utu	reciprocal response
waiata	song / to sing
whakahoki mauri	to restore balance to the community
whakapapa	genealogy / connection
whakawhanaungatanga	establishing relationships
whānau	family
whanaungatanga	relationship / family connection

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Using a Cigarette Purchase Task to Assess Demand for Tobacco and Nicotine-containing Electronic Cigarettes for New Zealand European and Māori/ Pacific Island Smokers

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Can nicotine-containing electronic cigarettes (NECs) help to reducing smoking prevalence for Māori and Pacific Island persons in New Zealand? We compared simulated demand for tobacco cigarettes, reactions to first-time use of NECs, and the impact of NEC availability on tobacco demand for New Zealand European and Māori/Pacific Island smokers. New Zealand smokers (N=357; 30.1% Māori/Pacific ethnicity and 69.9% NZ European/ Other) completed questionnaires and of these 210 consented to attend a session in which they sampled an NEC and completed simulated demand tasks. Māori/Pacific smokers were significantly more price sensitive than NZ European/Other smokers. NECs were partially substitutable for tobacco cigarettes for both New Zealand European and Māori/Pacific smokers, but were rated as more satisfying by Māori/Pacific smokers. Tobacco excise tax increases may be beneficial for discouraging smoking, particularly for Māori/ Pacific male smokers, and the availability of NECs at a lower price than tobacco cigarettes may enhance the effects of price increases. NECs may be an attractive vehicle for nicotine replacement therapy and may reduce ethnic disparities in smoking prevalence in New Zealand.

Keywords: simulated demand, electronic cigarettes, subjective effects, nicotine replacement therapy, ethnicity, Māori

Smoking is a major contributor to health inequalities between ethnic groups in New Zealand with consistently poor outcomes for Māori and Pacific Island people (Blakely, Ajwani, Robson, Tobias, & Bonne, 2004; Howden-Chapman & Tobias, 2000; Wamala, Blakely, & Atkinson, 2006). Smoking prevalence among Māori (37.1%) and Pacific Island groups (23.3%) is elevated compared to New Zealanders of European descent (13.6%) (Ministry of Health, 2010, 2014a, 2014b). This increased prevalence hinders Māori and Pacific development aspirations and opportunities through premature death, smoking-related illness and the erosion of economic, social and cultural wellbeing (Māori Affairs Committee, 2010). Māori women have the highest smoking prevalence at 42% compared to Māori men at 34% (Ministry of Health, 2015). Achieving reductions in smoking prevalence among Māori and Pacific peoples, specifically for women, is of vital importance to reduce health inequalities and achieve the national public health goal of a smokefree society (Edwards et al., 2009; Ministry of Health, 2004). Increasing the price of tobacco via excise tax is an integral part of New Zealand's comprehensive tobacco control program and is considered one of the most effective single tobacco control measures worldwide (Chaloupka, Yurekli, & Fong, 2012; Gallet & List, 2003; IARC Working Group, 2011). It is important to consider whether this strategy can help reduce inequalities in smoking prevalence.

Considerable research has used econometric methods to assess how responsive the consumption of cigarettes is to changes in price at a population level (Chaloupka & Warner, 2000; Chaloupka et al., 2012; IARC Working Group, 2011). Meta-analyses of these studies estimate that the average price elasticity of demand for cigarettes is around -0.4, which indicates that a 10% increase in the price of cigarettes would reduce consumption by 4% (Chaloupka & Warner, 2000; Chaloupka et al., 2012; Gallet & List, 2003; IARC Working Group, 2011). Data from New Zealand are consistent with this result, with price elasticity estimates for tobacco from 0.43 - 0.45 (O'Dea, Thomson, Edwards, & Gifford, 2007; Thomson, O'Dea, Wilson, Reid, & Howden-Chapman, 2000). However, it is also important to consider whether responsiveness to price varies across ethnic groups in New Zealand, which cannot be achieved using population-based data. Individual-level data provides a way to compare responsiveness to price across different groups, by administering surveys before and after tobacco excise tax increases.

Two survey studies have compared how Māori, Pacific Island, and New Zealand European smokers respond to tobacco excise tax increases in New Zealand. Walton, Li, Newcombe, Tu, and Berentson-Shaw (2013) found that non-Māori were more likely than Māori to have made a smoking-related behavioural change (quit, tried to quit or cut down on smoking) and that men were more likely to have made a smoking related change than women following a 10% tobacco excise tax increase in 2012. However these differences were not statistically significant. Following a similar tax increase in 2013, Grace, Kivell, and Laugesen (2014) found that Māori and Pacific Island smokers reported significantly greater reductions in cigarettes per day compared to NZ European smokers. The same sample was

interviewed again in 2014 following an additional tax rise and Māori and Pacific Island smokers continued to report greater reductions (Tucker, Kivell, Laugesen, & Grace, 2016). Results also showed that Māori and Pacific Island males reported the greatest reductions in smoking than Māori and Pacific Island females and NZ European smokers. These results suggest that excise tax may be helpful in reducing tobacco-related harm for Māori and Pacific Island smokers in New Zealand and highlight the potential risk for Māori and Pacific Island females who have the highest smoking prevalence and may not benefit from excise tax increases as much as other groups. However, these studies only evaluated the effects of previous price increases. It is important to understand the effects of a wider range of potential price increases on smokers' demand for tobacco, as well as to identify additional policy measures that might help to reduce inequalities for Māori and Pacific Island persons, particularly females.

Simulated demand for cigarettes can be estimated using a Cigarette Purchase Task (CPT), which allows for relatively efficient data collection by asking individuals to estimate their daily cigarette consumption at a broader range of prices than could be assessed in the natural economy (MacKillop et al., 2012). It also produces multiple unique measures in addition to price elasticity, including maximum consumption, price of maximum expenditure, maximum amount spent per day and breakpoint (point at which the individual would quit smoking) which provide a richer understanding of how changes in price would influence the decision to smoke. A number of studies support the validity of using a CPT to derive indices of demand. Robust convergent and divergent validity have been demonstrated in adults (Few, Acker, Murphy, & MacKillop, 2012; Grace et al., 2014; MacKillop et al., 2008; Murphy, MacKillop, Tidey, Brazil, & Colby, 2011), and temporal stability has also been established over a one-week period (Few et al., 2012). Grace, Kivell, and Laugesen (2015a) assessed temporal stability over three months, before and after the 2013 New Zealand tax increase. They found that although the overall results were highly similar, demand after the tax increase was significantly lower

for three prices that were immediately above the current market price, indicating that CPT responses are sensitive to tax increases. These studies suggest that the CPT may be a valid and reliable way to measure demand for cigarettes. (Grace et al., 2014) tested if CPT demand curves could predict changes in smoking habit following a tax increase. They anticipated that individual measures of demand derived from application of Hursh and Silberberg's (2008) exponential model would predict changes in smoking in response to price increases. Although results showed that smoking decreased for the sample overall after the tax increase, none of the measures derived from Hursh and Silberberg's model (including α, price elasticity) were significant predictors of changes in smoking. Grace et al. suggested that because α is based on fits to the full range of prices in the CPT, it may be a less effective predictor than an elasticity measure based on a more limited range near the market price. They showed that a measure of local elasticity, defined as the regression slope for simulated demand on five prices ranging from NZ$0.64 to NZ$0.85 per cigarette, predicted decreases in smoking after the tax increase. This suggests that demand curves and measures derived from the CPT may be used as individual difference variables to predict which smokers will benefit most from tobacco excise tax increases and inform how price could be used to reduce inequalities in smoking prevalence and smoking-related health outcomes.

It is also important to consider how demand for tobacco may change with the availability of alternative products. NECs are a nicotine replacement product that has been shown to be safer than tobacco cigarettes (Farsalinos & Polosa, 2014) and are favourably evaluated by smokers compared to traditional nicotine replacement products (Bullen et al., 2010; Steinberg et al., 2014) and more favourably by females than males (Grace, Kivell, & Laugesen, 2015b). Behavioural economic studies of NECs have been used to estimate cross-price elasticity (CPE): a measure of the relative change in demand for NECs when available at a constant price, given a change in price of regular cigarettes. CPE estimates for NECs are significantly positive,

indicating that they are at least partially substitutable for regular cigarettes (Grace et al., 2015b; Quisenberry, Koffarnus, Hatz, Epstein, & Bickel, 2016). This suggests that NECs may be used alongside tobacco price policy as a means of reducing tobacco consumption. However, as NECs are a relatively recent development, their efficacy for smoking cessation and long-term risk profile are currently unclear. As a result, regulation has been undertaken with caution in a number of jurisdictions.

In New Zealand, e-cigarettes cannot currently be legally sold if they contain nicotine; however in March 2017 the Ministry of Health proposed legislative change in order to regulate NECs as consumer products (Ministry of Health, 2017). Though this legislation is unlikely to be enacted until at least 2018, it has the potential to complement current tobacco control strategies, including price policy, to reduce demand for tobacco cigarettes. In this study we planned to compare simulated demand curves and related measures such as cross-price elasticity for New Zealand European and Māori/Pacific Island smokers using Grace et al.'s (2014) sample. Information regarding ethnic and gender group differences in demand curves could indicate whether price policy could affect smoking-related inequalities in New Zealand. In addition, we compared participants' reactions to first-time use of nicotine-containing electronic cigarettes (NECs) and their potential impact on tobacco demand.

METHOD

Participants

Adult smokers (*N*=357) were recruited by newspaper, community and internet advertising from four major New Zealand cities: Auckland (*n*=72), Wellington (*n*=151), Christchurch (*n*=71) and Dunedin (*n*=63). Participants were required to be daily smokers, over 18 years old, who purchased their own tobacco and had no intention to quit prior to 1 January 2013. Current or past users of NECs, current users of antismoking medication or non-cigarette tobacco, and pregnant/breastfeeding women were excluded. All participants were interviewed in November-December 2012 (Wave 1), and contacted and

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attended a session in February-March 2013 (Wave 2). Excluded were those who could not be contacted or declined further participation (*n*=131). Also excluded were those who indicated that they had quit smoking by February-March 2013 (*n*=16), leaving a sample size of 210.

Of the sample, 30.1% reported Māori/Pacific ethnicity and 69.9% reported NZ European or other ethnicity. No significant differences were found between Māori/Pacific and NZ European/Other in terms of income, education, number of cigarettes smoked per day or other measures of smoking dependence. See Grace et al. (2014) and Tucker et al. (2016) for detailed demographic data.

All received a NZ$15 shopping voucher and a chance to win a NZ$250 tablet computer for each wave. The study was approved by the University of Canterbury and Victoria University of Wellington Human Ethics Committee, and participants provided written consent.

Procedure

Participants completed a pencil-and-paper questionnaire which involved questions about demographics, type of cigarette smoked (factory-made [FM] or roll-your-own [RYO]), packet of tobacco typically purchased (20, 25 or 30 cigarettes per pack for FM; or 30g, 40g or 50g for RYO) and several measures of addiction, and the Cigarette Purchase Task (CPT). Finally, participants were given the opportunity to sample an NEC.

Measures

Cigarette Purchase Task

The CPT is used to measure demand for tobacco over a range of prices. The CPT was adapted from that used by MacKillop et al. (2012) for prices that would be suitable for the New Zealand market. Two versions of the 64-item CPT were used depending on whether the participant indicated that they typically smoked factory-made (FM) or roll-your-own (RYO) tobacco.

For FM smokers, prices per cigarette ranged from NZ$0.00 to NZ$5.0 and for RYO smokers, prices were listed in terms of cost per pouch of 30g or 50g of tobacco. To generate prices comparable to those used for the FM CPT, prices for the latter were expressed relative to the current market price for cigs in Nov

2012 (NZ$0.70/cig) multiplied by the market price per package of 30 or 50g tobacco (NZ$30 and NZ$50 at the time) and rounded to whole dollar amounts. Thus minimum non-zero amount and maximum amount were NZ$2.00 and NZ$214.00 for 30g; NZ$4.00 and NZ$357.00 for 50g. The average current market price was at the same ordinal point among the prices in the scale as the NZ$0.70/cig on the FM CPT. This way the two questionnaires covered approximately two orders of magnitude, with current market price at the same position, and changes in price relative to current market price were constant across all versions. See Grace et al. (2014) for the instructions and a full description of the range of prices used.

Several analyses were conducted to characterise CPT demand curves. Measures were obtained directly from CPT responses and derived from fits of Koffarnus et al.'s (2015) exponentiated version of Hursh and Silberberg's (2008) demand model using Microsoft Excel Solver . The equation for the exponentiated model is:

$$Q = Q_0 * 10^{k(e^{-\alpha Q_0 C} - 1)}$$

where Q is the demand at price *C*, Q_o is maximum consumption (i.e. demand when cigarettes are free), *k* is a constant representing the span of the data in $\log_{10}$ units and α is elasticity, a fitted parameter which determines how quickly demand falls with increases in price (higher values of α indicate that demand falls more rapidly with price). Here, we determined *k* by subtracting the $\log_{10}$-transformed average consumption at the highest price from $\log_{10}$-transformed average consumption at the lowest price (giving *k*=1.31). Essential Value (EV) is a definition of value based on sensitivity to price and is inversely proportional to α (Hursh & Roma, 2016). The formula for EV is:

$$EV = 1/(100 * a * k^{1.5})$$

EV is linearly related to normalised P_{max}, the price at which consumption is maximum. P_{max} can be obtained from the observed data or calculated using the formula (Hursh & Roma, 2016):

$$P_{max} = m/(Q_o * k^{1.5}), \text{ where}$$
$$m = 0.084k + 0.65$$

Omax is the level of response output at P_{max}, that is the maximum amount of money spent per day. O_{max} can be derived from normalised P_{max} or obtained from the observed data.

NEC sampling and questions

The experimenter explained how the NEC (Safe Cigarette brand) produced a vapour containing nicotine when inhaled and could be puffed similarly to a regular cigarette. The NEC had tobacco extract flavour (no actual tobacco) and was listed as 18 mg/mL nicotine content. On analysis, the Safe Cigarette yielded 13.95 mg/mL nicotine, and 200 hand-drawn puffs at 20 mg of nicotine per puff. After taking several puffs on the NEC, participants were asked to rate both their regular cigarette and the NEC for liking and satisfaction on a single-item 10-point Likert scale (1=don't like at all; 10=like very much). Participants then completed three questions about how many e-cigarettes and regular cigarettes they would purchase per day at different prices. The price of the e-cigarette was listed as NZ$0.25 per cigarette which consisted of 15 puffs of vapour. The price of regular cigarettes was listed as either NZ$0.35, NZ$0.70 or NZ$1.40 per cigarette. These prices were chosen to correspond approximately to 0.5x, 1x and 2x the market price of cigarettes in New Zealand at the time the study was conducted.

Results

Cigarette Purchase Task

Figure 1 shows demand for cigarettes (cigarettes/day) reported on the Cigarette Purchase Task (CPT) for Māori/Pacific (upper panel) and NZ European/Other (lower panel) groups, separately for males and females. For both groups, results were characteristic of demand curves for inelastic commodities with cigarette consumption mostly high and decreasing sharply at relatively high prices, though males appear to report greater demand at all prices. The exponentiated model (Koffarnus et al., 2015) provided an adequate description of the average data, accounting for 66% of the variance. Stein et al.'s (2015) algorithm was used to identify nonsystematic data. 14 cases did not meet the trend criterion, 4 cases did not meet the bounce criterion and 2

cases did not meet the reversal criterion. These cases were excluded from demand curve analyses.
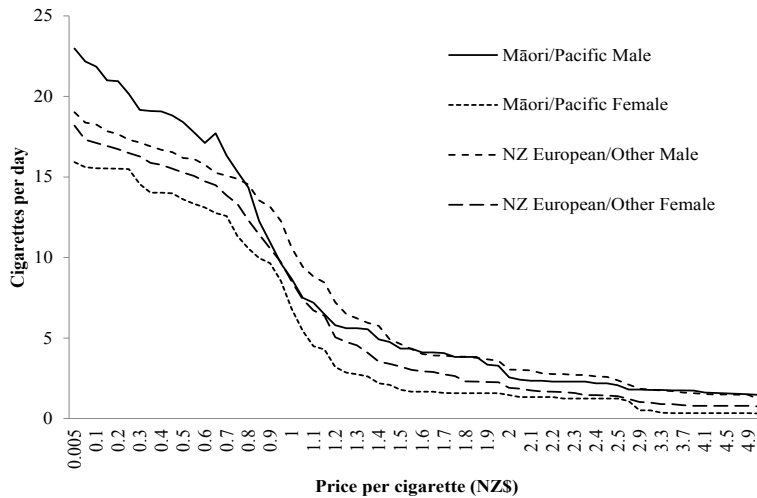

Figure 1. Mean predicted cigarettes per day using the CPT plotted separately for Māori/Pacific males (solid line) and females (dotted line) and NZ/European/Other male (small dashed line) and females (large dashed line).

At prices lower than the current market price in November 2012 (NZ$0.725/cigarette), the increased demand by males appeared greater for Māori/Pacific males than NZ European/Other males. This was confirmed by a repeated-measures ANOVA which found a significant main effect of price [$F(1,63)$ = 418.25, $p<.001$, φ = .559] and significant interactions between price and ethnicity [$F(1,63) = 1.42, p <.05$, φ = .004], price and gender [$F (1,63) = 1.94$, $p<.001$, φ = .006], and price, ethnicity and gender [$F(1,63) = 2.02, p<.001$, φ = .006]. Post hoc analyses [Tukey HSD; $ps>.05$] revealed that there were no significant male-female differences for NZ European/Other smokers. However Māori/Pacific males reported that they would smoke more cigarettes per day than Māori/Pacific females at the lowest price NZ$0.00 [$p=.017$].

Average measures of demand derived from fits of Koffarnus et al.'s (2015) demand model to CPT data from individual smokers are shown in Table 1. Univariate ANOVAs were conducted on the derived measures. A significant main effect of gender [$F (1, 333) = 7.048$, $p < .01$, φ = .021] was found for Q_o; males estimated that they would smoke significantly more cigarettes per day than females if cigarettes were free [Ms = 19.75 and 17.32 respectively]. There

was also a significant gender x ethnicity interaction for Q_o [$F (1, 331) = 4.452, p < .05$, φ = .013]. Post-hoc testing (Tukey HSD) indicated that Māori/Pacific males predicted that they would smoke more cigarettes per day if they were free [M = 22.97] than Māori/Pacific females [M = 15.91, $p<.05$]; while there were no significant gender differences in Q_o in the NZ European/Other group [Ms = 18.84 and 18.04 respectively]. A significant main effect of gender was found for observed O_{max} [$F = (1, 310) = 7.987$, $p=.005$, φ = .025]; males reporting a higher estimated maximum expenditure per day [M = NZ$18.57] than females [$M$ = NZ$14.43]. There were no significant differences in EV, normalised O_{max}, normalised P_{max}, or breakpoint [$ps>.05$].

Availability of NECs

When demand for tobacco cigarettes was averaged over the three prices, the availability of NECs produced a 19% decrease in demand for tobacco

cigarettes for Māori/Pacific smokers and a 26% decrease for NZ European smokers. A repeated measures ANOVA was conducted on tobacco cigarette demand with NEC availability and price as within-subjects factors and ethnicity as a between-groups factor. There was no difference found for demand between Māori/Pacific and NZ European/Other smokers [$F (1,127) = 0.6628, p=.417$]. A repeated measures ANOVA was also conducted on NEC demand when tobacco cigarettes were concurrently available at NZ$0.35, NZ$0.70 and NZ$1.40 and, again, no significant differences between Māori/Pacific and NZ European/Other [$F (1, 205) = 0.7335, p=.393$].

CPEs were calculated for individual participants as the regression slopes of (log) NEC demand on (log) cigarette price. There were no significant differences in the CPEs for Māori/Pacific smokers and NZ European/Other smokers [Ms = .11 and .19 respectively, $t (205) = .9155, p=.36$]. The average CPE for NZ European/Other smokers was significantly greater than zero [$t (146) = 3.922, p<.001$] but the average CPE for Māori/Pacific was not [$t (146) = 1.481, p=.14$]. CPE was not significantly correlated with any other derived demand measures.

NEC Ratings

Figure 3 shows the average satisfaction ratings for regular cigarettes and NECs by ethnicity. A repeated-measures ANOVA was carried out with cigarette type (own-brand/NEC), gender

Table 1. Mean scores for measures of demand derived from the CPT.

	Māori/Pacific M (SD)		NZ European/Other M (SD)	
	Male	Female	Male	Female
EV	0.47 (0.51)	0.36 (0.37)	0.53 (0.79)	0.42 (0.41)
Observed Q_0	22.97 a (13.57)	15.91 c (9.33)	18.84 b (13.42)	18.04 b (12.27)
Observed O_{max}	20.37 a (19.97)	13.21 c (7.98)	18.07 a (16.95)	15.08 c (12.21)
Normalised O_{max}	10.86 (11.71)	8.16 (8.50)	12.20 (18.05)	9.58 (9.34)
Normalised P_{max}	1.69 (1.49)	1.77 (1.93)	2.16 (2.07)	1.91 (1.89)
Breakpoint	1.25 (0.70)	1.43 (0.73)	1.46 (0.72)	1.48 (0.68)

Note. Subscripts indicate significantly higher (a) and lower (c) means at $p<.05$ according to Tukey HSD.

and ethnicity as within- and between-group factors. Significant main effects were found for gender [$F (1,328) = 6.696$, $p<.05$, φ = .020] and cigarette type [$F = (1,338) = 21.127$, $p<.001$, φ = .060]. The gender x cigarette type [$F (1,328) = 6.187, p<.05$, φ = .019] and ethnicity x cigarette type interactions were both significant [$F (1,328) = 6.967, p<.005$,

φ = .021] but there was no significant gender x ethnicity x cigarette type interaction, indicating that the effects of gender and ethnicity were independent of one another. NEC ratings were significantly greater for Māori/Pacific [*M*=6.96] than for NZ European/Other smokers [*M*=5.93] [Tukey HSD, *p*<.005] while there was no difference in own-brand cigarette ratings [*Ms* = 7.35 and 7.59, *p*=.821]. The Māori/Pacific group satisfaction ratings for NECs were 94.7% as high as those for regular cigarettes, whereas the NZ European/Other group satisfaction ratings were 78.1% as high for NECs as regular cigarettes.
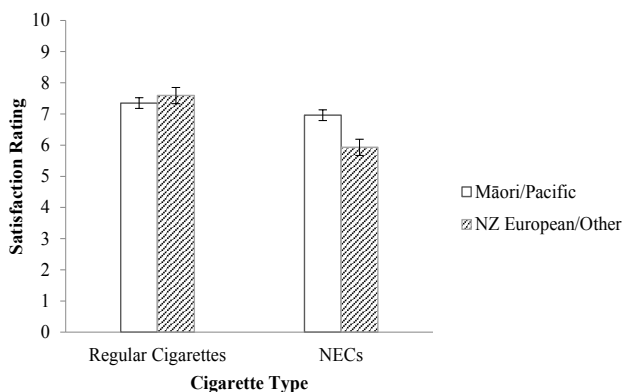

Figure 3. Average Satisfaction Ratings for Regular Cigarettes and E-Cigarettes, shown separately for Māori/Pacific (unfilled bars) and NZ European/Other (filled bars). Error bars indicate +1 SE.

Discussion

To our knowledge this is the first study to compare simulated demand generated using a Cigarette Purchase Task by ethnicity and gender. We aimed to compare demand for cigarettes and NECs, ratings of NECs, and cross-price elasticity of NECs for Māori/Pacific and NZ European/Other males and females using a simulated demand procedure.

Simulated demand curves showed similar trends for Māori/Pacific and NZ European/Other smokers in which demand for cigarettes decreased with price. However some differences were evident. Males demonstrated higher demand for cigarettes at prices lower than the average price per cigarettes at the time sampled (approximately NZD$0.725), greater maximum consumption and greater maximum expenditure than females. This is consistent with the differences observed in the measures of demand derived from fits of the Koffarnus et al. (2015) demand model

to the CPT data. Furthermore, Māori/Pacific males showed greater maximum consumption at extremely low prices. These findings indicate that, for Māori/Pacific male smokers, smoking behaviour may be more limited by price and that if cigarettes were to become more affordable relative to income (as would be the case without repeated annual tobacco excise tax increases), Māori/Pacific males may be at risk of increasing their smoking behaviour. This finding is consistent with the survey-based data described in Tucker et al. (2016) which found that Māori/Pacific males reduced their smoking rate at a greater rate than

Māori/Pacific females following two annual 10% tobacco excise tax increases. Both the survey-based data and simulated demand data suggest that Māori/Pacific males are more price sensitive than Māori/Pacific females and NZ European/Other smokers and sustaining tobacco excise tax increases may be an especially effective strategy for discouraging smoking for these individuals. This raises concern for Māori/Pacific females, who have elevated smoking prevalence, and suggests that other strategies may be required to help Māori/Pacific females reduce their smoking behaviour and ultimately quit smoking.

We found that the availability of e-cigarettes reduced demand for tobacco cigarettes for Māori/Pacific and NZ European/Other smokers. Māori/Pacific smokers responded more particularly favourably to e-cigarettes, however there were no differences in demand for tobacco cigarettes when NECs were concurrently available

or cross-price elasticity, and there were no overall correlations between favourability ratings and demand or cross-price elasticity. Reasons for this discrepancy are unclear. While both self-reported subjective effects (e.g. liking, satisfaction, and craving reduction) and elasticity of demand may both be used to infer reinforcement effects, these data are often disparate and may not be correlated with one another or actual smoking behaviour (Shahan, Bickel, Madden, & Badger, 1999). We found no significant relationship between subjective ratings of NECs and cross-price elasticity in this study which suggests that these two measures of the reinforcing efficacy of NECs are independent of one another. While Māori/Pacific smokers responded particularly favourably to NECs, the results of this study suggest that this is unrelated to their simulated demand for NECs or the extent to which they may consider NECs an alternative to cigarettes.

It is important to interpret our results with caution considering the simplicity of the measures used. Though previous studies have successfully used single-item measures for overall satisfaction for other NRT products (Schneider et al., 2004), a single-item measure of satisfaction is likely to have lower reliability compared to multiple item measures. Additionally, while hypothetical purchase tasks for cigarettes and alcohol have been shown to correspond with actual behaviour change (Amlung, Acker, Stojek, Murphy, & MacKillop, 2012; Lagorio & Madden, 2005; MacKillop, Amlung, Acker, & Stojek, 2010; MacKillop, Miranda, et al., 2010; Mackillop et al., 2016; Madden et al., 2004; A. G. Wilson, Franck, Koffarnus, & Bickel, 2016), it is unclear whether CPE as measured using our cross-price task corresponds with the complexity of the actual decision to smoke and actual substitution behaviour. As such, participants may have under- or overestimated the extent to which they would purchase NECs if they were concurrently available with tobacco cigarettes which may explain why ethnic differences were found in satisfaction ratings but not CPE.

Another potential limitation is that participants were asked to rate satisfaction after their first exposure to NECs. It is also unknown whether

the high levels of NEC satisfaction, especially for Māori/Pacific smokers, would be maintained long-term. It has been suggested that smokers may have a 'honeymoon' period when they first use NECs and their satisfaction may reduce over time (Bullen et al., 2013). This may have impacted participants' responses to the demand questionnaires and inflated the simulated demand for NECs. However the modest estimated cross-price elasticity for NECs generated in this study appears credible and not over-inflated compared to previous behavioural economic studies (Johnson, Bickel, & Kirshenbaum, 2004; O'Connor et al., 2014; Shahan, Odum, & Bickel, 2000). More research is needed to determine whether the high satisfaction ratings and demand for NECs can develop into sustained satisfaction, habitual use and eventual cessation.

It must be noted that while are not aware of any previous research comparing simulated demand for cigarettes in Māori/Pacific and NZ European/Other smokers, research does suggest that lower income groups are more price sensitive (Wilson, 2007; Wilson & Thomson, 2005; Wilson et al., 2010). In our sample Māori/Pacific and NZ European/Other smokers reported similar income levels; however based on the 2013 Census (Statistics New Zealand, 2014) Māori and Pacific peoples median person incomes (NZ$22,500 and NZ$19,700 respectively) were 78.9% and 69.1% of the national median personal income (NZ$28,500). Given the lack of significant differences in income between Māori/Pacific and NZ European/Other smokers in our study, our sample may not be representative of the Māori/Pacific population in New Zealand and thus with a more representative sample we may have observed more price sensitivity in Māori/Pacific smokers. Our findings provide some preliminary support for the idea that Māori/Pacific males are more price sensitive than Māori/Pacific females and NZ European/Other smokers and that sustaining tobacco excise tax increases may be beneficial for discouraging smoking for this population.

The current status of NECs in New Zealand is that they cannot be legally sold if they contain nicotine, however in recent years a number of regulatory options have been explored. Wilson et al. (2015) list options ranging from fully liberalised access (free market), increased access as a quit aid or NRT product available in pharmacies, available upon prescription by a registered health professional, available upon prescription from a hospital only pharmacy, to full restraint (complete ban on importing and use). The authors also discuss supplementary policy measures including making it illegal to use NECs in smokefree environments, implementing quality standards, quality criteria for legal sales (age limits, regulated marketing) and price mechanisms to encourage switching. In March 2017 the Ministry of Health proposed legislative change in order to regulate NECs as consumer products but with similar restrictions to tobacco cigarettes including prohibition of sale to people under the age of 18 years, limits on advertising and vaping in public places, and requirements for product safety (Ministry of Health, 2017). This reflects a relatively liberal regulatory status but with consideration of some of the concerns raised by Wilson et al. (2015). The Ministry of Health (2017) proposal considers excise tax on nicotine e-liquid but acknowledges the complexity of this decision with regard to the unknown risk profile of NECs, the risk of discouraging switching to NECs from tobacco cigarettes, and the limited evidence on the responsiveness of NEC demand to price changes. With annual 10% tobacco excise tax increases scheduled until at least 2020 and the proposed changes to NEC regulation expected to take effect from 2018 at the earliest, it is important to consider whether these policies could reduce demand for tobacco in New Zealand.

Our findings have some implications for the proposed changes to regulation of NECs in New Zealand. Consistent with previous behavioural economic studies (Grace et al., 2015b; Quisenberry et al., 2016), our results support this policy, suggesting that NEC availability could reduce demand for tobacco cigarettes overall. In addition, NECs may be a particularly satisfactory delivery vehicle for NRT for Māori/Pacific smokers. The combination of increased price sensitivity and increased NEC favourability ratings suggests that if NECs become available with an appropriate price differential to regular cigarettes, price sensitive groups including Māori/Pacific male smokers may be encouraged to switch. This supports the idea of differential taxation for NECs relative to tobacco cigarettes (Chaloupka, Sweanor, & Warner, 2015; Grace et al., 2015b; Wilson et al., 2015). Although their combination with price policy may encourage NEC use for Māori/Pacific males, the similar sensory and behavioural aspects of NECs may encourage their use for Māori/Pacific females, who appear to be less physically dependent on nicotine but more responsive to behavioural, social and cultural cues (Tucker et al., 2016). As NECs become more available and accessible and as the Smokefree 2025 goal approaches, it will be important to determine whether the positive ratings do translate into increased likelihood of e-cigarette uptake, particularly for Māori/Pacific smokers, whose smoking prevalence remains disproportionately elevated despite comprehensive targeted and population-level tobacco control strategies. In this way, the availability of NECs as a consumer product in New Zealand may reduce ethnic disparities in NRT use and subsequently smoking prevalence.

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