

The Evaluation of a Brief Mental Health Therapy Initiative in Primary Care: Is There a Role for Psychologists?

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It is estimated that approximately 17% of the New Zealand population has a mild or moderate mental health problem. However, New Zealand's public mental health services are largely designed and resourced to provide for only the most severe mental health problems, leaving those with mild and moderate mental health concerns to fend for themselves or rely on services available at the primary care level. The core focus of the evaluation reported here is the collection of intake/outcome and other associated data with a subset of patients who used a local brief therapy service for adults with mild/moderate psychological problems. Completed intake and outcome Brief Symptom Inventory-18 (BSI-18) questionnaires were available from 90 patients undertaking brief therapies. The average scores on the Somatic, Depression, Anxiety and Global Severity Indices of the BSI-18 had improved significantly by the end of treatment, a result corroborated by therapist ratings and feedback from service users. Summary data from this evaluation are discussed in light of growing calls for improvement and innovation within primary care mental health services. Some of the issues associated with the application of psychology within this setting are considered, both from the perspective of changes to the way services could be delivered and the implications for changes to the training of applied psychologists.

It is estimated that approximately 5% of the New Zealand population has a severe mental health problem with another 17% estimated as having a mild or moderate mental health problem (Oakley Browne, Wells, & Scott, 2006). New Zealand's current public mental health spending is largely allocated to secondary services that are designed to provide for those with the most severe problems (Mental Health Commission, 2005). These services often do not cater for individuals suffering from mild or moderate presentations, which can cause considerable distress and disability. This funding bias in favour of secondary services exists despite a number of studies having shown that primary care based services can provide an effective and economical service for patients allowing easy access and reducing long-

term mental health difficulties (Hickie & Groom, 2002; Kathol & Clark, 2005; Murphy & Bertolote, 2001). In New Zealand more than one third of people with a mental health difficulty present to their General Practitioner (GP) (MaGPIe Research Group, 2003), and for many of these individuals the GP is the first and only health professional they have contact with (Kirmayer, Robbins, Dworkind, & Yaffe, 1993; Meadows, Liaw, Burgess, Bobevski, & Fossey, 2001). Of the large number of people with mental health difficulties being seen solely by their GPs, many do not receive adequate assessment or intervention (Vines et al., 2004).

Recent initiatives attempting to improve primary care mental health outcomes for patients include the integration of specialist mental health

professionals into these settings (Bower & Gilbody, 2005; Bower & Macdonald, 2005; Kolbasovsky, Reich, Romano, & Jaramillo, 2005; Meadows et al., 2001; Vines et al., 2004). A psychologist working at the primary care level is likely to see clients with a broad range of psychological difficulties at the point at which they first seek help. The focus of the primary care sector is on initial screening and community based treatment of health problems, health monitoring, and relapse prevention and management. The specialist assessment and intervention programmes typically delivered at a secondary level are generally inappropriate or unnecessary for the primary care population. Brief psychological assessment and interventions are often more apposite in this context. Fortunately there is good evidence that therapy can result in significant and positive changes for clients over a short period of time (e.g., Barkham, Rees, Stiles, Hardy, & Shapiro, 2002; Beretta, de Roten, Drapeu, Kramer, Favre, & Despland, 2005; Bloom, 2002; Bor, Miller, Gill, & Parrott, 2004).

Up to this point in time there have been only a small number of pilot projects conducted around New Zealand to explore the effectiveness of brief therapy services within primary care settings. In addition to the projects reported elsewhere in this issue, another project of note was the *Waikato Primary Health Organisation Counselling Project Pilot Study* (2005-6). The primary objective of this initiative was to evaluate ways to increase access to counselling/therapy

services for patients who were not eligible to receive government-funded mental health services and who could not afford private therapy options. Most of the therapists involved in the Waikato pilot study were counsellors rather than psychologists. The most common presenting complaints were anxiety, depression and/or stress occurring in relationship/family/workplace contexts. Therapists were encouraged to use the Hospital Anxiety and Depression Rating Scale (HADS; Zigmond & Snaith, 1983) to both identify baseline levels of distress and monitor change. Unfortunately very few therapists incorporated the use of this (or any other formal monitoring measures) into their practice. Data obtained from those who did employ the HADS indicated an improvement in anxiety and/or depression scores for the majority of clients. The clinical outcomes of the programme were promising, but the overall recommendation was for further evaluation of the service to be undertaken.

New Zealand Psychologists in Primary Care

The growing international awareness of the potential value of psychologists contributing to healthcare within the primary health setting has been slow to find application in New Zealand. In 2008 the NZ Health Information Service (NZHIS, 2008) reported that there were only 10 psychologists in their annual survey who were employed by Primary Health Organisations (PHOs). This may be due in part to our smaller and less diverse health care sector, the relative shortage of psychologists, and the prevailing view that the primary care sector acts only as the gatekeeper with the 'real' interventions being provided by secondary/tertiary sector services. Training may also have a role, as clinical psychologists in New Zealand are typically prepared to provide assessment and treatment in secondary rather than in primary care settings, where clients are likely to present with a mild to moderate level of psychological distress and a briefer therapy approach is likely to be beneficial.

As with other health sector professions there is a shortage of trained professional psychologists. Therefore,

if psychology is to be relevant and effective in our health communities it is imperative that psychologists think strategically about their role and are informed by evidence-based best practice when making decisions about practice focus and resource allocation. Once again we are confronted by the classical dilemma, whether the limited numbers of psychologists are better located at their traditional clinical 'coalface' in secondary and tertiary health services (the ambulance at the bottom of the cliff), or working with a community health and secondary prevention focus in primary care (the fence at the top of the cliff).

Current Research

The treatment outcome data reported here was collected as part of an evaluation of a primary care mental health initiative run by a PHO in New Zealand's North Island. The purpose of the PHO project was to provide brief, but timely, intervention to those in the community who were experiencing mild/moderate mental health difficulties. The service model allowed therapy to be accessed within a matter of days after the first consultation with the GP, hopefully preventing deterioration or the need for medication. Therapy was provided by local counselling practitioners and to a lesser extent, psychologists. There were no specific intervention protocols, so service providers conducted 'treatment as usual' for them, albeit under the constraints of time-limited therapy (4+2 sessions). GPs and therapy providers were offered three workshops covering a range of skills that are useful in time-limited therapy (Bor, Gill, Miller, & Parrott, 2004). This included the use of pencil-and-paper measures to monitor change, core principles and values in brief therapy, focussing on client strengths, goal setting, and problem-solving. The use of pencil-and-paper measures to monitor therapy progress was not considered to be "treatment as usual" by many counselling practitioners.

The key objective of the project evaluation was to assess whether clinically and personally relevant change can be facilitated via brief mental health interventions delivered within the primary care setting. While a summary

of the main project outcomes is given, our principal focus is on what may be learned from this exercise about possible roles for psychologists in primary care mental health settings.

Method

Participants

During the 15-month duration of the project 1,455 individuals were referred for brief interventions. Referrals were received from 204 GPs representing 56 of the 60 practices in the PHO area. Although 50% of the referrals were received from only 34 GPs they were drawn from both urban and rural practices, including geographical areas that had high proportions of Māori inhabitants. Age, gender, and ethnicity data were available for a large proportion of the entire group. Data on family/living situation and employment were available for approximately half of this group.

Data from a substantial number of clients (n=712) was not be included in subsequent analysis because (a) they failed to attend any sessions, (b) they only attended one session so the collection of pre/post intervention data was meaningless, (c) there were data missing, or (d) the participant was aged 17 years or under. This latter group (n=116) were omitted because the focus of the project was on adult clients and because some of the measures used were not valid for a younger age group. The remaining 743 clients (51% of the total number referred) attended at least two therapy sessions.

Although therapists were required to use formal monitoring tools as part of their service agreement, the research team did not have direct control over when, how, or even if these measures were used with clients. Of the remaining 743 clients only 86 (12% of those known to have two or more sessions) completed Brief Symptom Inventory - 18 (BSI-18, Derogatis, 2000) forms both pre and post therapy (the 'Complete Data' group). The remaining 661 clients who attended two or more treatment sessions were allocated to the 'Incomplete Data' group. Table 1 presents demographic information for the Incomplete and Complete Data groups.

Table 1
General Demographic Data for the Incomplete and Complete Data groups

	Incomplete Data (n = 657)	Complete Data (n = 86)
Gender		
Female	490 (75%)	68 (80%)
Male	166 (25%)	14 (16%)
Not specified	1 (0%)	4 (4%)
Age		
Mean (years)	39.8	36.9
Range	18 - 84	18 - 72
Ethnicity		
NZ European	555 (84%)	69 (80%)
Māori	55 (8%)	10 (12%)
Other	13 (2%)	3 (3%)
Not specified	34 (5%)	4 (5%)
Family/living situation		
single with no dependents	125 (19%)	19 (22%)
in a relationship caring for dependents	158 (24%)	24 (28%)
sole parenting	74 (11%)	14 (16%)
in a relationship with no dependents	72 (11%)	16 (19%)
Not specified	228 (35%)	13 (15%)
Employment status		
full-time or part-time employment	207 (32%)	38 (44%)
not in paid employment	194 (30%)	32 (37%)
Not specified	256 (39%)	16 (19%)

The Mann-Whitney U Test was used to compare the age of participants within the two data sets. Pearson's chi-square statistic was employed to compare the gender, ethnicity, family situation, employment status, number of therapy sessions attended, number of therapy sessions clients failed to attend, presence of a counselling history and use of psychiatric medications (during the time of therapy). These analyses demonstrated no significant difference on any of these variables.

Data Collection

Quantitative and qualitative data were collected from the clients and their therapists using a range of instruments. Therapists provided demographic data and information about session attendance for their participating clients on a monthly basis using a standardised reporting template.

At the commencement and end of the therapeutic contact participants were asked to complete the Brief Symptom Inventory - 18 (Derogatis, 2000). The BSI-18 is a brief but sensitive self-report inventory designed to screen for psychological distress and psychiatric

disorders in medical and community populations. In essence, the BSI-18 is a 'case recognition' screening measure. It has particular value in clinical and evaluation settings where administration time is limited, and where interest is focused on the most commonly occurring disorders. It may also be used as an outcome measure. The BSI-18 generates three clinical subscales (Somatization, Depression, and Anxiety) and one full scale summary score (Global Severity Index). For each of the four BSI-18 summary scores the raw scores are converted to standardised T-scores with a scale mean of 50 and a standard deviation of 10 points. The author of the BSI-18 suggests a general rule for establishing *caseness* such that if an individual's T-score on the Global Severity Index (GSI) scale is greater than 62, or they return a T-score more than 62 on two of the three clinical subscales, then the individual is *at-risk* of a mental health difficulty and can be considered a 'case'. The BSI-18 technical manual reports data from two normative samples, one being a community sample. Using this sample, internal consistency (coefficient alpha)

for the four subscales has been calculated to range from .74 to .89. Convergent validity has been demonstrated with the Symptom Checklist - 90 - R (Derogatis, 1994). Additional validity data are provided by Derogatis and Savitz (2000).

The Reliable Change Index (RCI) developed by Jacobson and Truax (1991) was used as the statistical method for evaluating change in BSI-18 scores between intake and discharge from therapy. The method involves calculating a score for each individual by examining the size of the difference between their intake and outcomes scores, and making an allowance for standard errors of measurement that occur within the whole sample. That is, not only do rating scale scores have to be different (improved or worsened), but also need to show a difference greater than could be accounted for by statistical variability in the data. If the RCI score is above predefined thresholds, then change is considered to be substantial and reliable.

Therapists were also asked to complete an Intervention Summary Form when they had finished their work with each client. The focus of the form was to obtain the therapist's rating of client progress, a summary of the main techniques and interventions used, an indication of the appropriateness of the referral, and any recommendations given to the client on discharge. In the terminology of standard clinical practice this would be referred to as a treatment summary, and would form the basis of the discharge notification to the referrer.

A nine-item Consumer Satisfaction Survey was developed for the current research. In it participants were invited to rate the overall quality of service, satisfaction, accessibility, professionalism of service, etc., on four-point Likert scales.

Results

Session Usage

The therapists were funded to complete their intervention within four sessions, with an additional two sessions being available on request if required. Table 2 shows session attendance data for participants within the Incomplete

Table 2
Session Attendance Data for the Incomplete and Complete Data groups

	Incomplete Data (n = 657)	Complete Data (n = 86)
Total sessions offered	2,749	347
Total sessions attended	2,411 (88%)	332 (96%)
Total 'Did Not Attend' (DNA)	338 (12%)	15 (4%)
Average sessions attended (range)	3.7 (2-14)	4.3 (2-10)

and Complete Data groups. Yates chi-square reveals a significant difference in the proportion of attended and failed ('Did Not Attend') appointments between the two groups, $\chi^2 (1, N = 3,096) = 18.61, p < 0.001$.

Brief Symptom Inventory - 18

A total of 236 individuals completed at least one BSI-18 form. This includes data from the 86 participants in the Complete Data group, who had both intake and outcome measures available. Two-hundred and eighteen BSI-18 forms were collected at the point of therapy intake, and 101 at the point of discharge. Table 3 presents the mean subscale BSI-18 intake and discharge data for the Incomplete and Complete Data groups.

Complete Data group. While the mean T-score at intake for the Somatization subscale placed the Complete Data group within the non-

clinical range (<62) it is interesting to note that half of the respondents scored above the clinical threshold on this subscale at intake. Mean intake scores on the Depression, Anxiety and Global Severity Index subscales were in the clinical range. By discharge none of the mean subscale scores on the BSI-18 were above the clinical cut-off. The percentage of participants indicating that they were experiencing clinically significant distress (according to their GSI scores) decreased from 70% at intake to 19% at discharge. Sixty participants in this group met the caseness criterion (i.e., T-score on the GSI subscale greater than 62, or T-score greater than 62 on two of the three clinical subscales) at the pre-intervention assessment. Sixteen participants met the 'caseness' criterion at the post-intervention assessment.

As the data from the BSI-18 were not normally distributed the non-parametric Wilcoxon matched pairs test

was conducted to compare intake and discharge scores on all four scales of the measure. These analyses demonstrated a significant difference in pre and post intervention T-scores on all four scales; Somatization ($z=6.56, p<0.001$), Depression ($z=7.32, p<0.001$), Anxiety ($z=7.24, p<0.001$), and Global Severity Index ($z=7.63, p<0.001$).

The percentage of respondents who showed 'statistically reliable change' on the basis of the Reliable Change Index score is also shown in Table 3.

There were no significant differences between gender groups on any BSI-18 subscale, and no significant correlations with age. The BSI-18 contains one question relating to suicidal ideation (Question 17, "thoughts about ending your life"). Scores of two (moderate) or above indicate elevated risk. This was the case for 48 respondents at intake, but only 5 by discharge.

Therapist Intervention Summary

Two hundred and five Therapist Intervention Summary forms were received for participants in the Incomplete Data group, 43 were received for clients in the Complete Data group. The most frequent types of therapy used were cognitive therapy (79% and 87% for the Incomplete Data and Complete Data groups respectively), behaviour therapy (65% and 47%) and psychodynamic therapy (20% and 31%). Where data for the Complete Data group existed it

Table 3
BSI-18 Subscale Mean T-scores, Standard Deviations and Percentage above Clinical Threshold Pre and Post Intervention for Incomplete and Complete Data groups, and Percentage Reaching RCI Threshold Within the Complete Data group

Subscale	Pre-Intervention		Post-Intervention		SD	Caseness (%)	% Reaching RCI threshold
	Mean T-score	SD	Caseness (%)	Mean T-score			
Somatization							
Incomplete	59.0	11.8	47	57.0	10.7	33	
Complete	60.6	11.2	50	50.1	9.3	11	33
Depression							
Incomplete	66.2	13.1	78	60.7	10.6	44	
Complete	66.6	10.0	70	53.1	10.7	20	47
Anxiety							
Incomplete	66.4	10.7	64	62.6	10.7	50	
Complete	65.6	10.5	63	52.5	11.3	16	40
Global Severity Index							
Incomplete	67.1	9.3	70	61.7	10.0	50	
Complete	66.7	9.7	70	52.1	11.4	19	70

showed that on average clients received treatment based on three different therapy models. It is most likely that practitioners were employing generic/eclectic therapy techniques drawn from a range of models that could be delivered in the briefer than usual time available to them.

As Therapist Intervention Summary forms were available for only half of the Complete Data group it is difficult to ascertain whether particular therapeutic orientations or strategies were more efficacious than others in the current evaluation. A rating of client improvement by the therapist was available on 38 of the 43 summary forms. This rating was completed on a 5-point Likert Scale ('0' for *no improvement* to '4' for *significant improvement*). The mean rating was 3.4 ($SD = 0.75$, range 1-4).

Consumer Satisfaction Survey

Twenty nine of the 86 participants in the Complete Data group returned Consumer Satisfaction Surveys. All mean scores were at the higher end of the satisfaction continuum suggesting that participants who completed the survey were happy with the service they received. It is interesting to note that these data suggest that participants did not experience any great difficulty completing the BSI-18, a concern that had been expressed by practitioners during the early stages of the research project.

Discussion

While there was a disappointingly low data return rate in this evaluation, a high proportion of those who completed the rating scales at the point of intake met the criteria for "caseness" on the BSI-18. By the point of discharge most of the clients were returning scores on the clinical measures that placed them within the non-clinical range. This change was corroborated by therapists who completed the Intervention Summary forms, and was well represented in the feedback provided by clients on the Customer Satisfaction Survey forms. The confluence of these sources suggests that the finding may be robust. These data suggest that providing brief mental health (therapy/counselling) interventions within a primary care

setting may be a valuable activity in absolute terms.

The generally positive message that can be drawn from these data must be tempered by the low response rates. The reasons for low response rates may be many and varied, for example, inadequate training, time constraints, lack of familiarity and ease with the process/measures, or philosophical objection to the particular mode of measurement. When asked, the rationale given by some therapists for reluctance to complete the measures was that it was distressing for the client. Specifically, it was argued that some of the items on the rating scales used were too upsetting. While this may be true in a few cases it would be unlikely to be true for the majority. Indeed, if completing the rating scales generated a high level of distress this would be an indication that the client may have been inappropriately referred to a therapy programme that was targeted at those with less severe difficulties.

In the evaluation process the central role was given to those delivering the service, the therapy practitioners. We wanted to both respect the confidentiality of the relationship between the therapists and their clients, and provide the practitioners with tools and procedures that would assist in their work. While this was achieved to a degree, the evaluation process did not attract the full and enthusiastic support of all the practitioners. Most of the processes associated with the programme were no different from those employed in regular therapy/counselling practice, that is, obtaining informed consent from clients for intervention procedures, establishing a baseline against which change can be assessed, collecting data in 'real time' as a way of making adjustments to the course of the intervention, assessing outcomes, and liaising with and providing feedback to referrers. It is acknowledged that these activities may be allocated varying amounts of time, and attributed with varying degrees of importance depending on a range of factors such as the professional training of the therapist, the work context, work focus, etc. Despite this, it is clear that some procedures adopted in this evaluation appeared to be unfamiliar to

a number of the counsellors, or were not routinely used by them.

Therapists expressed concern that when the client only had four/six sessions funded it was unreasonable to expect them to use a portion of this valuable time to complete rating scales. This view suggests limited experience in collecting these data as the collection and use of psychometric data was seen as unrelated to the process of therapy. One challenge to the programme as it continues, is to provide practitioners with a basic training and orientation to a range of strategies for monitoring change and measuring outcomes, provide a clear rationale for the inclusion of psychometric measures as just one way of tracking clinical change, and implement a measure that is quick and easy to use, has high face validity, and clear clinical applicability.

A common theme raised during the course of the project by therapists, and by the clients within the Customer Satisfaction Survey forms, was that while the availability of four or six sessions was appreciated, there remained an unaddressed need for those who required support over a greater period of time, or at a level of sophistication that could not be encompassed within six sessions. This highlights the gap between services delivered within a primary care setting and those that are delivered by specialist secondary services. This project has been valuable in demonstrating the level of need for brief mental health interventions in primary care, and confirming the utility of funding such a service. However, further efforts are needed to fill the void between primary and secondary mental health services.

Is There A Role For Psychologists?

This project raised a number of areas of psychological practice that could be further developed within the primary care setting. The application of general psychological principles and practices used in this mental health project are likely to also apply to areas of physical health.

The first of these domains of practice relates to the adequate and accurate screening of patients who have a significant psychological component to their presentation. There is a general

consensus in the research literature that many primary care practitioners have little knowledge or training to assist them with the identification of mental health presentations (Davis, Galyer, Halliday, Fitzgerald, & Ryan, 2008; Dew, Dowell, McLeod et al, 2005; MaGPIe Research Group, 2003). It was of note in the current study that there were no GPs who routinely provided screening data to support the referral of a patient for therapy; this would not usually be the case when referring a patient on to a medical colleague. Davis et al. (2008) found that GPs attended to different data when selecting patients for referral than was identified by a well validated mental health screening tool, in that case the General Health Questionnaire – 12. These researchers suggested that the routine use of a standardised screening device could aid the accurate and consistent recognition of mild/moderate mental health problems in primary care, and thus facilitate more timely referral and intervention when problems are still in the early stages of development. While many health practitioners are willing to rely on apparently standardised medical tests to guide their medical interventions, they seem more reluctant to rely on standardised mental health assessment instruments.

The randomised controlled therapy trials or therapy evaluations that have been conducted refer to data collected either in academic or research institutions or within existing secondary service contexts. Criteria for accepting individuals into these studies are often DSM-IV based (APA, 2000) and strictly applied, and the therapies delivered tend to be based on models of psychopathology that are associated with longer interventions than would be considered appropriate or possible within the realm of primary care services. While it is possible that a number of the therapies developed for application within secondary care settings may be applicable to the primary care context, few therapies have been either developed or evaluated specifically with primary care clients and issues in mind. The further evaluation of effective psychological therapies for primary care is an area of huge potential for

psychologists working as programme designers and evaluators.

Against this background of practice innovation there will be a need for the primary care practitioners to upskill. If there are moves to improve accuracy in case identification, and new validated programmes exist to assist individuals presenting within the primary care environment, then we will need suitably trained and skilled people able to deliver the programmes in an expert and flexible manner. Unfortunately, while limited specialist training in primary care psychology is available overseas (Bray, Frank, McDaniel, & Heldring, 2004) it is not currently a training focus for psychologists in New Zealand. While aspects of the training received by Health Psychologists may be specifically targeted on the primary care client, this is not true of training in clinical psychology or other domains of applied psychology.

McDaniel, Hargrove, Belar, Schroeder, and Freeman (2004) identify seven assumptions which underlie any curriculum designed to prepare psychologists for work within the primary care setting. They suggest that psychologists will need to be prepared to work (a) as generalists who can play multiple roles, (b) within developmental, bio-psycho-social and systemic frameworks, (c) with knowledge of both prevention and wellness, not just pathology and illness, (d) collaboratively, with other practitioners as well as with the patient, (e) in a way which recognises the relational dimension (e.g., patient-family, physician-patient), (f) using a broad range of expertise (e.g., behavioural health, developmental, psychopathology, issues in family and other systems, research and evaluation), and (g) in a range of settings and contexts. Current training options in psychology within New Zealand may cover some of these domains, but there is no single training programme that provides complete coverage. If this basic scheme is accepted, then there may be opportunities for both comprehensive as well as adjunctive programmes for those who have completed other types of training.

Preliminary work suggests that both clinical and professional needs

exist within the primary mental health care setting, and that the application of psychology has potential to enhance outcomes for members of our community. However, there are a number of challenges, including the development and establishment of robust assessment and intervention methods, and the promotion of psychological skills to a sector that is not familiar with what the discipline has to offer. Finally, much will hinge on the capacity of professional psychology to provide an appropriately trained and oriented workforce to meet any demand that is generated.

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Erratum

Apologies are offered to Karma Galyer for the mis-print in spelling of Galyer, on the front page and in the contents listing in the last issue of the New Zealand Journal of Psychology Vol 37, Issue 3, November 2008