

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

Kai-Chi Katie Lee and Mei Wah M. Williams
Massey University, Auckland

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* (LLTFF; 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, reference 13/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 statistically 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.

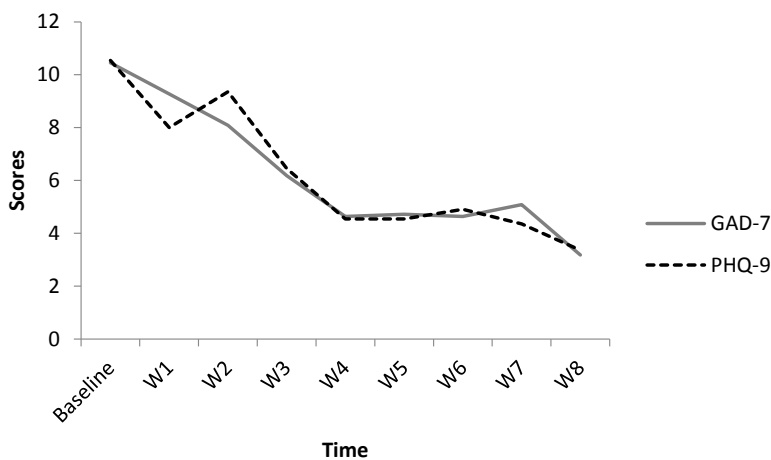


Figure 1. Mean scores on the Patient Health Questionnaire (PHQ-9) and Generalised Anxiety Disorder (GAD-7) for total sample from pre-treatment to end of treatment.

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.

Clinical 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 ≥ 10) at baseline, and seven

(63.6%) were in the clinical range on the GAD-7 (score ≥ 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 $\eta^2 = .68$).

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		t-value	df	p-value
				change	Confidence Interval*			
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		t-value	df	p-value
				change	Interval range*			
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, Shafraan, 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 LLTF 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 LLTF programme with East Asian and Southeast Asian students. As the LLTF 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 established, although Mandarin versions of LLTF 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).

References

- Abe, J., Talbot, D. M., & Geelhoed, R. J. (1998). Effects of a peer program on international student adjustment. *Journal of College Student Development, 39*, 539-547.
- American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR, 4th ed. Text Revision*. Washington, DC: American Psychiatric Association.
- Anderson, L., Lewis, G., Araya, R., Elgie, R., Harrison, G., Proudfoot, J., ... Williams, C. (2005). Self-help books for depression: How can practitioners and patients make the right choice? *British Journal of General Practice, 55*, 387-392.
- Anderson, L., Scrimshaw, S. C., Fullilove, M. T., Fielding, J. E., Normand, J., & the Task Force on Community Preventive Services (2003). Culturally competent healthcare systems: A systematic review. *American Journal of Preventive Medicine, 24*, 68-79.
- Arroll, B., Goodyear-Smith, F., Crengle, S., Gunn, J., Kerse, N., Fishman, T., ... Hatcher, S. (2010). Validation of PHQ-2 and PHQ-9 to screen for major depression in the primary care population. *Annals of Family Medicine, 8*, 348-353.
- Baker, R. W., & Stryk, B. (1989). *Student Adaptation to College Questionnaire* (SACQ). Los Angeles: Western Psychological Services.
- Barkham, M., Rees, A., Stiles, W. B., Shapiro, D. A., Hardy, G. E., & Reynolds, S. (1996). Dose-effect relations in time-limited psychotherapy for depression. *Journal of Consulting and Clinical Psychology, 64*, 927-935.
- Bean, J. (1982). Student attrition, intentions, and confidence: Interaction effects in a path model. *Research in Higher Education, 17*, 291-321.
- Brein, M., & David, K. (1971). Intercultural communication and the adjustment of the sojourner. *Psychological Bulletin, 76*, 215-230.
- Bennett-Levy, J., Richards, D. A., & Farrand, P. (2010). Low intensity CBT interventions: A revolution in mental health care. In J. Bennett-Levy, D. A. Richards, P. Farrand, H. Christensen, K. M. Griffiths, D. J. Kavanagh, ... C. Williams (Eds.), *Oxford Guide to Low Intensity CBT Interventions* (pp. 3-18). New York: Oxford University Press.
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin, 119*, 111-137.
- Boyer, S. P., & Sedlacek, W. E. (1988). Noncognitive prediction of academic success for international students: A longitudinal study. *Journal of College Student Development, 29*, 218-223.
- Boyle, C., Lynch, L., Lyon, A., & Williams, C. (2011). The use and feasibility of a CBT intervention. *Child and Adolescent Mental Health, 16*, 129-135.
- Brown, J.C., & Daly, A.J. (2005). Intercultural contact and competencies of tertiary students. *New Zealand Journal of Educational Studies, 40*, 85-100.
- Cavanagh, K. (2010). Turn on, tune in and (don't) drop out: Engagement, adherence, attrition, and alliance with internet-based interventions. In J. Bennett-Levy, D. A. Richards, P. Farrand, H. Christensen, K. M. Griffiths, D. J. Kavanagh, ... C. Williams (Eds.), *Oxford Guide to Low Intensity CBT Interventions* (pp. 227-233). New York: Oxford University Press.
- Chellingsworth, M., Williams, C., McCreath, A., Tanto, P., & Thomlinson, K. (2010). Using CBT-based self-help classes to deliver written materials in Health Service, further education and voluntary sector settings. In J. Bennett-Levy, D. A. Richards, P. Farrand, H. Christensen, K. M. Griffiths, D. J. Kavanagh, ... C. Williams (Eds.), *Oxford Guide to Low Intensity CBT Interventions* (pp. 215-223). New York: Oxford University Press.
- Chen, S. W.-H., & Davenport, D. S. (2005). Cognitive-behavioral therapy with Chinese American clients: Cautions and modifications. *Psychotherapy: Theory, Research and Practice, 42*, 101-110.
- Chen, T. M., Huang, F. Y., Chang, C., & Chung, H. (2006). Using the PHQ-9 for depression screening and treatment monitoring for Chinese Americans in primary care. *Psychiatric Services, 57*, 976-981.
- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin, 91*, 540-572.
- Clark, D. M. (2011). Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: The IAPT experience. *International Review of Psychiatry, 23*, 318-327.
- Crede, M., & Niehorster, S. (2012). Adjustment to college as measured by the Student Adaptation to College Questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review, 24*, 133-165.
- Cuijpers, P., Donker, T., van Straten, A., Li, J., & Andersson, G. (2010). Is guided self-help as effective as face-to-face psychotherapy for depression and anxiety disorders? A systematic review and meta-analysis of comparative outcome studies. *Psychological Medicine, 40*, 1943-1957.
- Dahmus, S., Bernardin, H. J., & Bernardin, K. (1992). Student adaptation to college questionnaire. *Measurement and Evaluation in Counseling and Development, 25*, 139-142.
- Dear, B. F., Titov, N., Sunderland, M., McMillan D., Anderson, T., Lorian, C., & Robinson, E. (2011). Psychometric comparison of the Generalized Anxiety Disorder Scale-7 and the Penn State Worry Questionnaire for measuring response during treatment of generalised anxiety disorder. *Cognitive Behaviour Therapy, 40*, 216-227.
- Education New Zealand (2014). *New Zealand International Education Snapshot 2014 January-August Report*. Retrieved from <http://www.enz.govt.nz/assets/Uploads/Final-Snapshot-Report.pdf>
- Eysenbach, G. (2005). The law of attrition. *Journal of Medical Internet Research, 7*, e11. doi: 10.2196/jmir.7.1.e11.
- Fitzgerald, J., Galyer, K., & Ryan, J. (2009). The evaluation of a brief mental health therapy initiative in primary care: Is there a role for psychologists? *New Zealand Journal of Psychology, 38*, 17-23.
- Foo, K. H. (2007). *Comparing characteristics, practices and experiential skills of mental health practitioners in New Zealand and Singapore: Implications for Chinese clients and cognitive behaviour therapy*.

- Unpublished doctoral dissertation, Massey University, New Zealand.
- Gyani, A., Shafran, R., Layard, R., & Clark, D. M. (2013). Enhancing recovery rates: Lessons from year one of IAPT. *Behaviour Research and Therapy*, *51*, 597-606.
- Hall, G. C. N. (2001). Psychotherapy research with ethnic minorities: Empirical, ethical and conceptual issues. *Journal of Consulting and Clinical Psychology*, *69*, 502-510.
- Hwang, W. C. (2011). Cultural adaptations: A complex interplay between clinical and cultural issues. *Clinical Psychology: Science and Practice*, *18*, 238-241.
- Isaac, S., & Michael, W. B. (1981). *Handbook in research and evaluation: A collection of principles, methods, and strategies useful in the planning, design, and evaluation of studies in education and the behavioral sciences* (2nd ed.). San Diego, CA: Edits Publishing.
- Jacobson, N. S., Dobson, K. S., Traux, P.A., Addis, M. E., Koerner, K., Gollan, J. K., Prince, S. E. (1996) A component analysis of cognitive behavioural treatment for depression. *Journal of Consulting and Clinical Psychology*, *64*, 295-304.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, *59*, 12-19.
- Jones, E. L. (1983). The courtesy bias in South-East Asian surveys. In M. Bulmer & D. P. Warwick (Eds.), *Social Research in Developing Countries* (pp. 253-260). London: UCL Press.
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Rodgers, B., Pollitt, P., Christensen, H., & Henderson, S. (1997). Helpfulness of interventions for mental disorders: Beliefs of health professionals compared with the general public. *British Journal of Psychiatry*, *171*, 233-237.
- Joyce S., & Woodhouse, M. (2013, 10 October). Changes to attract more international students to NZ. *Beehive.govt.nz*. Retrieved from <https://www.beehive.govt.nz/release/changes-attract-more-international-students-nz>
- Kaczmarek, P. G., Matlock, G., Merta, R., Ames, M. H., & Ross, M. (1994). An assessment of international college student adjustment. *International Journal for the Advancement of Counselling*, *17*, 241-247.
- Kocalevent, R. D., Hinze, A., & Brahler, E. (2013). Standardization of the depression screener Patient Health Questionnaire (PHQ-9) in the general population. *General Hospital Psychiatry*, *35*, 551-555.
- Kroenke, K., Spitzer, R. L., & Williams, J.B.W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*, 606-613.
- Leibowitz, J. (2010). Improving access to low intensity interventions for ethnic minority communities. In J. Bennett-Levy, D. A. Richards, P. Farrand, H. Christensen, K. M. Griffiths, D. J. Kavanagh, ... C. Williams (Eds.), *Oxford Guide to Low Intensity CBT Interventions* (pp. 567-575). New York: Oxford University Press.
- Leung, C. (2001). The psychological adaptation of overseas and migrant students in Australia. *International Journal of Psychology*, *36*, 251-259.
- Lloyd, M., & Abdulrahman, A. I. (2011). *Equally Connected Report 13: Living Life to the Full*. NHS Health Scotland: Equality Team. Retrieved from <http://www.healthscotland.com/uploads/documents/16293-Equally%20Connected%20Lothian%20-%20Report%2013.pdf>
- Lovell, K., Richards, D.A., & Bower, P. (2003). Improving access to primary mental health care: Uncontrolled evaluation of a pilot self-help clinic. *British Journal of General Practice*, *53*, 133-135.
- Lowe, B., Kroenke, K., Herzog, W., & Grafe, K. (2004). Measuring depression outcome with a brief self-report instrument: Sensitivity to change of the Patient Health Questionnaire (PHQ-9). *Journal of Affective Disorders*, *81*, 61-66.
- MacLeod, M., Martinez, R., & Williams, C. (2009). Cognitive behaviour therapy self-help: Who does it help and what are its drawbacks? *Behavioural and Cognitive Psychotherapy*, *37*, 61-72.
- Mahalik, J. R., & Kivlighan, D.J.R. (1988). Self-help treatment for depression: Who succeeds? *Journal of Counselling Psychology*, *35*, 237-242.
- Masuda, A., & Boone, M. S. (2011). Mental health stigma, self-concealment, and help-seeking attitudes among Asian American and European American college students with no help-seeking experience. *International Journal of Advanced Counselling*, *33*, 266-279.
- Mataix-Cols, D., Cameron, R., Gega, L., Kenwright, M., & Marks, I.M. (2006). Effect of referral source on outcome with cognitive-behavior therapy self-help. *Comprehensive Psychiatry* *47*, 241-245.
- Ministry of Education (nd). *International Education Factsheet: Outcomes for International students*. Retrieved from http://www.educationcounts.govt.nz/_data/assets/pdf_file/0019/163036/Factsheet-Outcomes-for-International-Students.pdf
- Ministry of Education (2014). *Exchange Rates and International Student Enrolments in New Zealand 2003-2013*. Wellington, New Zealand: Ministry of Education. Retrieved from https://www.educationcounts.govt.nz/_data/assets/pdf_file/0017/115028/Exchange-rate-analysis,-June-2014.pdf
- Mondia, S., Hichenberg, S., Kerr, E., Eisenberg, M., & Kissane, D. W. (2012). The impact of Asian American value systems on palliative care: Illustrative cases from the family-focused grief therapy trial. *American Journal of Hospice and Palliative Medicine*, *29*, 443-448.
- Nederhof, A. J. (1985). Methods of coping with social desirability bias : A review. *European Journal of Social Psychology*, *15*, 263-280.
- Ngai, M. M. Y., Latimer, S., & Cheung, V. Y. M. (2001). *Final report on healthcare needs of Asian people: Surveys of Asian people and health professionals in the North and West Auckland*. Auckland, New Zealand: Asian Health Support Service, Waitemata District Health Board.
- Oberg, K. (1960). Cultural shock: Adjustment to new cultural environments. *Practical Anthropology*, *7*, 177-182.
- Rienties, B., Beusaert, S., Grohnert, T., Niemantsverdriet, S., & Kommers, P. (2012). Understanding academic performance of international students: The role of ethnicity, academic and social integration. *Higher Education*, *63*, 685-700.
- Rienties, B., & Tempelaar, D. (2013). The role of cultural dimensions of international and Dutch students on academic and social integration and academic performance in the Netherlands. *International Journal of Intercultural Relations*, *37*, 188-201.
- Russell, J., Rosenthal, D., & Thomson, G. (2010). The international student experience: Three styles of adaptation. *Higher Education*, *60*, 235-249.
- Saw, A., Berenbaum, H., & Okazaki, S. (2013). Influences of personal standards and perceived parental expectations on worry for Asian American and White American college students. *Anxiety, Stress & Coping*, *26*, 187-202.
- Schmidt, M. M., & Miller, W. R. (1983). Amount of therapist contact and outcome in a multidimensional depression treatment program. *Acta Psychiatrica Scandinavica*, *67*, 319-332.
- Seesaengnom, D., Parackal, S., & Ho, E. (2012). Utilisation of and barriers to accessing primary health care services in New Zealand: A cross-sectional survey of Thai adults living in Auckland. In A. Sobrun-Maharaj, F. Rossen, S. Parackal, S. Nayar, E. Ho, D. Newcombe, ... S. Ameratunga (Eds.). *Social Environment*,

- Migration, and Health Proceedings of the Fifth International Asian and Ethnic Minority Health and Wellbeing Conference* (pp. 114-125). Auckland, New Zealand: University of Auckland.
- Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organisation's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. *Quality of Life Research, 13*, 299-310.
- Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. *Journal of the American Medical Association, 282*, 1737-1744.
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*, 1092-1097.
- Sue, D. W., & Sue, D. (1999). *Counselling the cultural different: Theory and practice* (3rd ed.). New York: John Wiley.
- Surdam, J., & Collins, J. (1984). Adaptation of international students: A cause for concern. *Journal of College Student Personnel, 25*, 240-245.
- Te Pou (2010). *Building evidence for better practice in support of Asian mental wellbeing: An exploratory study*. Retrieved from <http://www.tepou.co.nz/uploads/files/resource-assets/Building-Evidence-for-Better-Practice-in-Support-of-Asian-Mental-Wellbeing.pdf>
- Titov, N., Dear, B. F., McMillan, D., Anderson, T., Zou, J., & Sunderland, M. (2011). Psychometric comparison of the PHQ-9 and BDI-II for measuring response during treatment of depression. *Cognitive Behaviour Therapy, 40*, 126-136.
- Tucker, M., & Oie, T. (2007). Is group more cost effective than individual cognitive behaviour therapy? The evidence is not solid yet. *Behavioural and Cognitive Psychotherapy, 35*, 77-91.
- Vansteenkiste, M., Zhou, M., Lens, W., & Soenens, B., (2005). Experiences of autonomy and control among Chinese learners: Vitalizing or immobilizing? *Journal of Educational Psychology, 97*, 468-483.
- Waller, R., & Gilbody, S. (2009). Barriers to the uptake of computerized cognitive behavioural therapy: A systematic review of the quantitative and qualitative evidence. *Psychological Medicine, 39*, 705-712.
- Wang, W., & Leichtman, M. D. (2000). Same beginnings, different stories: A comparison of American and Chinese children's narratives. *Child Development, 71*, 1329-1346.
- Whitfield, G., & Williams, C. (2003). The evidence base for cognitive-behavioural therapy in depression: Delivery in busy clinical settings. *Advances in Psychiatric Treatment, 9*, 21-30.
- Williams, C. (2007). *Living life to the full*. Retrieved from <http://www.fiveareas.com>
- Williams, C. (2001). Use of written cognitive-behavioural therapy self-help materials to treat depression. *Advances in Psychiatric Treatment, 7*, 233-240.
- Williams, C., & Garland, A. (2002). A cognitive-behavioural therapy assessment model for use in everyday clinical practice. *Advances in Psychiatric Treatment, 8*, 172-179.
- Williams, M. W., & Cleland, A.M.M.M.T. (2016). Asian peoples in Aotearoa New Zealand: Implications for psychological practice. In W. W. Waitoki, J. S. Feather, N. R. Robertson, & J. J. Rucklidge (Eds.), *Professional practice of psychology in Aotearoa New Zealand* (3rd ed.) (pp. 81-97). Wellington, New Zealand: New Zealand Psychological Society.
- Williams, M. W., Foo, K. H., & Haarhoff, B. (2006). Cultural considerations in using cognitive behaviour therapy with Chinese people: A case study of an elderly Chinese woman with generalised anxiety disorder. *New Zealand Journal of Psychology, 35*, 153-162.
- World Health Organization Quality of Life Group (WHOQOL: 1994). Development of the WHOQOL: Rationale and current status. *International Journal of Mental Health, 23*, 24-56.
- World Health Organization Quality of Life Group (WHOQOL: 1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine, 28*, 551-558.
- Xie, Y., & Goyette, K. (2003). Social mobility and the educational choices of Asian Americans. *Social Science Research, 32*, 467-498. doi:10.1016/S0049-089X(03)000-18-8
- Yip, K-S. (2005). Chinese concepts of mental health: Cultural implications for social work practice. *International Social Work, 48*, 391-407.
- Zhang, J., & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations, 35*, 139-162.

Corresponding Author:

Dr Mei Wah Williams
School of Psychology,
Private Bag 102 904,
North Shore, Auckland 0745
Email: M.W.Williams@massey.ac.nz