

WITH A LITTLE HELP FROM MY FRIENDS: A MIXED METHODS STUDY OF
PSYCHOLOGICAL DISTRESS AND HELP-SEEKING PREFERENCES
OF CHINESE INTERNATIONAL STUDENTS
AT VICTORIA UNIVERSITY OF WELLINGTON

by

KELLY ATHERTON

300197200

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Abstract

Chinese international students have become an increasingly significant presence on tertiary campuses worldwide, with over 928,000 enrolled globally in higher education in 2017. The mental health of tertiary students has been recognised as a significant public health concern and the unique challenges faced by Chinese international students place them at higher risk of mental distress than domestic or other international students. However, there is a scarcity of literature focussing on the mental health of Chinese international students both internationally and in a New Zealand context. This study was undertaken to gather preliminary data on the existence and prevalence of psychological distress among Chinese international students at Victoria University of Wellington. It also investigated the help-seeking preferences of Chinese international students, their engagement with counselling services or barriers preventing engagement with counselling support, and their knowledge and use of additional university support services. Participants' views on managing stress and their advice for newly arrived Chinese students were also explored. A mixed methods approach was utilised to gather both quantitative and qualitative data via an online survey, utilising the Kessler-10 to measure psychological distress in conjunction with a variety of categorical and free-text response questions to gather other information. The survey was sent to all Chinese international students at Victoria University of Wellington in 2017. A total of 205 Chinese international students responded to the survey, from 836 enrolled students (response rate 24.5%). Results indicate that the majority of the Chinese international student population at Victoria suffer from high levels of psychological distress ($K10=23.33$, $SD=6.97$). These results are comparable with studies of Chinese students who study abroad, or in their home country. Consistent with international research, participants preferred to use informal sources of support, most notably their parents and friends when stressed. They rated academic staff and student services as the supports they would be least likely to turn to when stressed. Despite the high levels of psychological distress reported, very few participants had sought formal mental health support, with only 12.3% of the sample accessing Student Counselling while studying at Victoria. Cultural and practical barriers impacted their decision to utilise the service and they provided recommendations to make the service better known amongst the student group to

improve uptake. Participants' advice to new Chinese students included getting involved, developing friendships with fellow students, improving English proficiency, and asking for help when needed. The findings from this study support the growing body of literature that Chinese international tertiary students are in need of additional culturally appropriate interventions throughout their university journey to improve their wellbeing, their awareness and use of support services, and to aid their integration to both their host country and education environment.

Keywords

Chinese, international students, psychological distress, help-seeking, stress, support services, support, tertiary education, university.

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Contents

Abstract	ii
Acknowledgements	iv
List of figures	vii
List of tables	0
Chapter 1: Introduction and literature review	1
Tertiary education as an international phenomenon	2
International education in NZ	3
The mental health of tertiary students	5
The mental health of international tertiary students	6
The mental health of Chinese international students	9
The mental health of Chinese international students in NZ	11
Chinese students and mental health	11
Chinese cultural beliefs	12
Chinese society	15
Chinese students and help-seeking	19
Barriers to help-seeking	21
Cultural barriers	22
Practical barriers	25
Significance of the study	26
The setting of the study	26
Summary and aims	27
Chapter 2: Methodology	28
Introduction	28
Research questions	28
Research design	31
Measures	35
Validity and Reliability	38
Trustworthiness	38
Ethical and cultural considerations	39
Population of interest	40
Recruitment	41
Data collection and analysis	41
Conclusion	44
Chapter 3: Results	46
Introduction	46
Summary of quantitative data	48
Summary of qualitative data	55
Summary of findings of 'other' responses	60
Overall summary of findings	61
Chapter 4: Discussion	63
Introduction	63
Survey engagement	63
Psychological distress	64
Stress and help-seeking	65
Student Counselling use and barriers	74
Awareness and use of university services	83
Advice to new students	85
Recommendations for Victoria and other tertiary education providers	87

Limitations	92
Future research	94
Conclusions	94
References	97
Appendices	130
Appendix A. Victoria Ethical Approval	130
Appendix B. Emails to participants with translation	131
Appendix C. Participant Information Sheet	135
Appendix D. Qualtrics survey with translation	140

List of figures

Figure 1: Convergent parallel design data model32

Figure 2: K10 score comparison with the general NZ population52

Figure 3: Who Chinese students would or would not turn to for help...53

Figure 4: Awareness and use of university support services.....55

List of tables

Table 1: Survey response rate.....	47
Table 2: Demographics.....	49
Table 3: Sample and population comparison.....	50
Table 4: Student Counselling use and barriers.....	54
Table 5: Question 14 Major themes.....	56
Table 6: Question18 Major themes.....	58
Table 7: Question19 Major themes.....	59

Chapter 1: Introduction and literature review

Chapter 1 introduces the project with a review of relevant literature. This begins with a brief overview of international student mobility, a review of the economic impact of New Zealand's (NZ) international education industry and discussion about government legislative requirements to support international students. The mental well-being of the tertiary student population is detailed, narrowing the focus to the wellbeing of international students and more specifically Chinese students. The concept of psychological distress as a frequently used measure of mental health is introduced. A brief summary of Chinese cultural beliefs and Chinese society is provided, focussing on the impact of these on Chinese international student mental health and help-seeking. Help-seeking among the tertiary student population is reviewed along with models of barriers to help-seeking. The chapter ends with an overview of the current study, summary of Chapter 1, and the research aims.

Tertiary education as an international phenomenon

Each year, the number of students travelling outside their home country to study continues to grow, with international tertiary enrolments increasing globally, from 2 million students in 1999 to 5.3 million in 2017 (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 2017). It is predicted that this number will reach 7-8 million international students in 2025 (West, 2019).

The demand for higher education opportunities has led to intense competition in the recruitment of both international and domestic students, with countries and institutions all striving for a greater share of the lucrative student market. Strategies to increase international enrolments include the marketing of educational quality and academic standing, financial incentives through scholarship, improved promotion and availability of pastoral care support (Peak, 2018), targeting more internationally popular programmes of study, and better employment opportunities through the offer of post-study work rights (M. Eglington, Associate Director, International Recruitment and Business Development, Victoria International, personal communication, May 21st, 2019). Many universities have also made large investments to improve the quality of their facilities and offer the promise of good employment opportunities for graduates (QS Asia News, 2017).

Although international study is a valuable financial asset to host countries, it also positively benefits both students and host countries. Studying abroad offers opportunities to access quality education, improve global employability, advance English language skills (OECD, 2017), and for many students, the prospect of living and working in the host country post-graduation (Kim & Strandberg, 2013). Host campuses benefit from the presence of international students who enhance racial and cultural diversity (Wu, Garza & Guzman, 2015), and host countries benefit through connections to the rest of the world and the enriched intellectual and cultural environment (Zhang & Goodson, 2010).

Since the early 2010s, China has held the largest share of the outbound student market with over 928,000 students travelling offshore for their education in 2017 (UNESCO, 2017). The top-ranked destinations of Chinese tertiary students in 2017

were the USA, Australia and the United Kingdom, with NZ the 9th most preferred, receiving 17,646 students (UNESCO, 2019).

International education in NZ

Asian students began studying at NZ universities in the 1950s with the country now hosting over 125,000 full fee-paying international students at all levels of study in 2017 (Education NZ, 2018a). NZ, considered a 'minor player' in the tertiary international student market, accounts for only 2% of global enrolments. However, the importance of the international education sector to NZ's economy cannot be understated, contributing \$4.6 billion in 2017 (Education NZ, 2018b) through international tuition fees and living expenses (OECD, 2017). Compared to all levels of education, NZ universities held the largest share of international student enrolments (27.6%) and contributed over \$1.41 billion in earnings in 2017 (International Consultants for Education and Fairs (ICEF) Monitor, 2018). China, NZ's largest source country for international students, made up 43% of international student enrolments in NZ during 2017 (Universities NZ, 2018a).

Increasing international student numbers is a key target for the NZ government and the recently published Leadership Statement for International Education (Education NZ, 2018b) focussed on "increasing the value of the international education sector in all regions of the country" (p. 1) and increasing the economic value of the sector to 6 billion by 2025. There are a number of key drivers that have led NZ universities to increase their recruitment efforts to grow international student numbers. Most notable of these drivers are the continued decline in government funding to universities and the relatively flat growth in the domestic market, coupled with the significant financial benefits of recruiting full fee-paying students (M. Eglington, personal communication, May 21st, 2019).

Ensuring international students' wellbeing throughout their educational journey is a priority of the NZ Government. The country led the world by introducing legislation for national pastoral care requirements for international students through the development of The Code of Pastoral Care for International Students in 2002 (Ministry of Education (MOE), 2002) and the recently updated version, The

Education (Pastoral Care of International Students) Code of Practice 2016 (The Code) (NZ Qualifications Authority, 2016). All NZ education providers that enrol international students are required to be signatories to The Code, which was designed to ensure international students are well-informed before they depart their home country, and that they are safe and properly cared for while they are in NZ (NZ Qualifications Authority, 2016). In addition to The Code, NZ's MOE has recently launched two strategies to further support international student wellbeing. In 2017, the International Student Wellbeing Strategy was launched, with the overarching outcome to ensure that "international students feel welcome, safe and well, enjoy a high-quality education and are valued for their contribution to NZ" (Education NZ, 2017a, p.7). The strategy was designed to capture the whole international student experience in NZ, including economic wellbeing, education, health and wellbeing, and inclusion. In 2018, the NZ International Education Strategy 2018-2030 was released, outlining among other areas the provision for all international students to have an excellent student experience (Education NZ, 2018b).

The biannual International Student Barometer survey (i-barometer) gathers data on the experiences of international students in NZ and worldwide (i-graduate, 2018). The i-barometer tracks and compares students' responses throughout their student journey, including their arrival and orientation, their learning and living experiences, their satisfaction with support services, and whether or not they would recommend the institution. Results from the 2017 i-barometer survey found that 90% of university students were satisfied or very satisfied with their NZ experience and 85% would recommend their NZ institution to people who are thinking of studying overseas (Victoria International, internal statistics, 2018). These results were improvements on the 2011 i-barometer survey, where 88% percent of university students were very satisfied or satisfied with their experiences and 78% percent of university respondents (Generosa, Molano, Stokes & Schulze, 2013). The international student experience in NZ has also been explored through MOE commissioned surveys (MOE, 2004, 2008). The levels of satisfaction with a broad variety of areas relating to tertiary study were investigated, including student accommodation, education and work experience, facilities, social support and future plans. Both surveys reported a positive experience was had by most international

students in NZ; however, the experience of Chinese students was notably less positive. Chinese students were less likely to recommend NZ and were less likely to want to develop connections with New Zealanders. However, of all students surveyed, Chinese students were the most likely to want to work and live in NZ post study and apply for permanent residency.

The mental health of tertiary students

Mental health, as a component of wellbeing, is considered a significant public health issue globally for both domestic (Stallman, 2010) and international students (Holm-Hadulla & Koutsoukou-Argraki, 2015). The prevalence of mental health issues among tertiary students is high (Guo, Huang, Liu & Wang, 2013; Hunt & Eisenberg, 2010; Stallman & Hurst, 2016) and concern for them as a psychologically vulnerable population is attracting greater research interest internationally (Bayram & Bilgel, 2008; Cvetkovski, Reavley & Jorm, 2012; Stallman, 2008, 2010; Tang, 2018). The age of onset for the majority of mental health disorders typically occurs between the age of 18–34 years (Stallman, 2010), coinciding with the time of life most students are enrolled in higher education. Higher education brings significant challenges which are well-documented in the literature to include, financial difficulties, homesickness, academic stress and loneliness (Ryan, Shochet, & Stallman, 2010). When combined with the transition to a new emotional, social and academic environment, these factors can contribute to poorer mental health outcomes (Stallman, 2008).

Tertiary education staff in the USA and Canada consistently report increasing numbers of students with severe psychological problems on their campuses through the annual survey of the Administrative Heads of College and university counselling centres (Gallagher, 2015). This reporting is consistent with a survey of Australian and NZ Heads of Counselling Services where 87.5% of respondents report greater numbers of students presenting with serious psychological problems over the previous 5 years (Stallman, 2012).

Australian studies assessing the prevalence of mental health disorders amongst tertiary students have shown significantly higher rates when benchmarked against

their non-student peers. Cvetkovski et al.'s (2012) study showed the prevalence of moderate distress was significantly higher in tertiary students than non-students (27.7% vs 21.2%) using the 21-item Depression, Anxiety and Stress Scale (DASS) (Lovibond & Lovibond, 1995). Also utilising the DASS, Larcombe et al. (2016) found that tertiary students scored higher than average on all DASS scales when compared to an age matched population.

Psychological distress, a commonly used indicator of mental health (Drapeau, Marchand & Beaulieu-Prévost, 2012; Ministry of Health, 2017) has been defined as a state of emotional suffering characterized by symptoms of depression and anxiety (Mirowsky & Ross, 2002). Psychological distress increases the likelihood of high-risk behaviours (Deasy, Coughlan, Pironom, Jourdan & Mannix-McNamara, 2014) and suicide (Mori, 2000; Tang, 2018) and if left untreated, can have a harmful impact on an individuals' mental health and wellbeing (Deasy et al., 2014). Elevated levels of psychological distress are reported to be "prevalent and persistent" among the tertiary population (Sharp & Theiler, 2018, p. 199), leading to poorer academic outcomes (Eisenberg Downs, Golberstein & Zivin, 2009; Sharp & Theiler, 2018).

Using the Kessler Psychological Distress Scale 10 (K10) (Kessler et al., 2002), Leahy et al. (2010) found a significantly higher prevalence of high psychological distress in an Australian university cohort when compared to the age-matched general population. Significantly higher distress levels were also reported at another Australian university when compared with the general population data (48% v 11%) (Stallman, 2010).

The mental health of international tertiary students

Along with the evidence supporting the high prevalence of mental illness and higher levels of distress among the tertiary student population, international students are often considered to be at higher risk of mental ill-health, due to the additional stressors they face adjusting to a new culture. For international students, the crossing of cultures can be inherently stressful (Szabo, Ward & Fletcher, 2016) and adds to the stress burden associated with tertiary study. Mori's (2000) report on the mental health concerns of international students states they are at "greater risk

for various psychological problems than are students in general” (p. 137). International students experience additional unique difficulties (Toyokawa & Toyokawa, 2002) including language barriers, differences in academic expectations, social and cultural differences, loss of social support structures (Yakunina & Weigold, 2011), financial difficulties (Mori, 2000) and perceived discrimination (Khawaja & Dempsey, 2007).

Despite the additional stressors international students confront, research findings are mixed as to whether these additional challenges cause greater levels of distress than domestic students. Recent research from Australia shows few significant differences when directly comparing rates of psychiatric morbidity between domestic and international students. Khawaja & Dempsey (2008) reported similar distress levels between international and domestic tertiary students; however, they noted the increased vulnerability of international students due to poorer levels of social support and greater probability of utilising dysfunctional coping strategies. Similarly, Skromanis et al. (2018) found that the levels of psychological distress were comparable between international and domestic students, but international students were at increased risk of several adverse health outcomes, experienced significantly lower levels of support, and were less likely to seek help. A further Australian study found no differences in levels of psychiatric distress between international and domestic students (Clough, Nazareth, Day & Casey, 2018), despite international students identifying greater help-seeking barriers, showing lower mental health literacy and having less favourable attitudes towards seeking help compared to domestic students.

The development of social networks in the host country is reported to positively predict mental health and decrease psychological distress among international students (Taylor & Stanton, 2007). Bochner et al. (1977, cited in Bethel, 2015) categorised the friendship patterns of international students. They identified co-nationals (friends from their home country) as forming international students’ primary social networks, host-nationals (friends from the host country) as forming the secondary network and international students (friends from non-home or host country) as forming the tertiary network. International students are reported to have

greater numbers of co-national friendships than with any other student cohort, implying that cultural similarities are their preference when forming social networks (Furnham & Alibhai, 1985, cited in Bethel, 2015). Although this ethnic clustering is a frequent criticism of international students, Young (2017) reports this criticism as misguided and instead should be viewed as “individuals seeking belonging and sense of community” (p. 442). Co-national friendships help to foster this sense of community with peers assisting in the establishment of a network of connections, providing emotional support and familiarity in an unfamiliar environment.

Connections with host-nationals as a predictor of sociocultural and psychological adaption in international students (Bethel, Szabo & Ward, 2016) is linked to positive psychological adjustment (Zhang & Goodson, 2011). However there has been a considerable amount of literature disputing the development of host-national friendship as a secondary network with study participants acknowledging their dissatisfaction with friendships in their host nation (Mori, 2000; Yeh & Inose, 2003; Zhang & Brunson, 2007; Zheng & Berry, 1991). Sullivan and Kashubeck-West (2015) suggest that greater connection between international students and their host nationals would play a significant role in reducing acculturative stress (cited in Xue, 2018).

The World Health Organization Quality of Life (WHOQOL) (The WHOQOL Group, 1998) questionnaires have been utilised to evaluate the differences between international and domestic student populations. The quality of life of NZ medical students in their early clinical years was evaluated, with international students reporting greater study stress and a higher incidence of psychological problems than domestic students (Henning, Krägeloh, Moir, Doherty & Hawken, 2012). Also using the WHOQOL, Hsu and Alden (2009) compared international (n=164) and domestic (n=218) student populations at a NZ university to investigate the link between religion, spirituality and quality of life. The results showed no difference in social or psychological quality of life between the two groups; however international students rated themselves as more religious or spiritual than their domestic

counterparts which the authors believed could be a beneficial coping mechanism to manage acculturative stress.

Although research continues to assess and support the improvement in satisfaction levels of international students in NZ, their wellbeing has received limited attention by researchers. Regardless of the lack of strong evidence when comparing the prevalence of mental health disorders or levels of psychological distress between international and domestic students, research clearly indicates that the international student population are a vulnerable cohort who require additional health supports and services.

The mental health of Chinese international students

Chinese students, with their markedly different cultural values, are reported to be particularly susceptible to stress and mental health concerns due to the challenges they must navigate to acculturate to western countries (Liu, 2009) and underestimating the challenges they will face (Yan & Berliner, 2011b; Liu et al., 2017). Although limited, the existing body of research investigating the mental health of Chinese international students frequently reports poorer mental health than their domestic counterparts.

Han, Han, Luo, Jacobs & Jean-Baptiste (2013) reported a higher prevalence of symptoms of depression (45%) and anxiety (29%) amongst the Chinese international student population at a university in the USA (n=130). Although not directly correlated, the researchers noted that the prevalence of depressive or anxiety disorders amongst the general university population at another university was 15.6% for undergraduates and 13% for postgraduate students (Eisenberg, Gollust, Golberstein, & Hefner, 2007). These researchers found that academic stress, social isolation, culture shock and language difficulties were correlated with symptoms of depression and anxiety. They recommended better advertising of counselling services at orientation and reinforcement of availability throughout the year, employing Chinese speaking counsellors and training of university staff to better support international student mental health issues.

Chinese-speaking international students in Australia have also been reported to have higher rates of psychological distress than their domestic peers (Lu, Dear, Johnston, Wootton & Titov, 2013). Using the K10, researchers assessed the psychological distress levels of 144 Chinese international students at an Australian university, reporting high levels of distress in over half of the population (mean K-10 score of 23.96). This compares to the significantly lower mean K10 score of Australian tertiary students of 20.24. The researchers recommended the trial of online interventions to treat psychological distress among this population and further evaluation of the barriers faced by students wanting to access mental health support. A further Australian study compared levels of stress and anxiety among Chinese international business students (n=167) with local students using the DASS (Redfern, 2014). Chinese international students were reported to experience significantly higher levels of stress and anxiety which fell in the moderately severe category. Recommendations from this study were to promote counselling and other supports more effectively at orientation and provide students with frequent reminders of counselling availability during the semester. Academic staff were recommended to increase their knowledge about Chinese students and their mental health issues, and university counselling services were encouraged to recruit Chinese speaking therapists to better cater to the needs of this population.

Yan and Berliner have written widely on the Chinese international student population in the USA. Their research, focusing on students' academic stressors (2009), stress and coping processes (2011a), acculturation and adjustment challenges (2011b) and sociocultural stressors (2013) have led to a range of recommendations to better support Chinese students. Among the recommendations are: providing more effective orientation programmes; including workshops on the cultural differences between China and the USA; providing more opportunities for socialisation to encourage successful integration into university life; assisting students to improve their English language proficiency; offering student loans to Chinese students under financial stress and for universities to consider hiring Chinese-speaking counselling staff.

The mental health of Chinese international students in NZ

There is a significant lack of research focussing specifically on the mental health of Chinese students in NZ. A singular study identified was that of Gharabi (2018), who reported on an online survey of tertiary education students which utilised the K10. It reported very high psychological distress rates for all populations, however, further demographic information was sparse with no breakdown of home nation for Asian students. Aside from the limited demographic data, the representativeness of the sample was of note with a very small number of international student respondents compared to domestic students (80 of 1573) in addition to the low response rate (4% of tertiary students invited to participate).

Results from the NZ Mental Health Monitor (2016) and the Health and Lifestyles Survey (2016) (cited in Kvalsvig, 2018) provide comparative data on the psychological distress levels of the general population of young people in NZ aged between 15-24 years. Although no mean K10 score is provided for this age group, it was found that 64% of participants were classified as having no to low distress, 31% had moderate distress, and 5% had high distress levels.

Chinese students and mental health

The numbers of Chinese students attending university in their home country continues to grow at a staggering rate, rising from 8.85 million in 2007 to almost 27 million students in 2017 (Statista, 2018). Despite the high numbers and consistent growth in this sector, research investigating the mental health of Chinese-domiciled higher education students remains limited.

University students in China are considered to be at high risk of developing mental illness and have low rates of help-seeking due to cultural beliefs (Lei, 2016). Zhang et al. (2018) surveyed 1400 higher education students from six provinces in China to assess their levels of psychological distress, resilience, and perceived social support using the K10. They reported a very high prevalence of psychological distress among Chinese college students (mean score = 23.02), noting higher distress levels in females and non-first year students. Although the researchers noted the comparatively small sample size, their conclusion was that most Chinese

university students experience moderate to serious psychological distress. Similar results were reported in a survey of university students (n=1128) in Shandong Province (Li, Denson & Dorstyn, 2017) where a mean K10 score of 23.55 was recorded, where higher levels of psychological distress led to more negative attitudes towards seeking help. However, they noted that the encouragement of family had a positive impact on the willingness of an individual to engage with professional support services, despite the individual retaining a negative attitude to help-seeking.

Psychological distress and suicidal behaviour were found to be common and highly associated in a study of over 5000 Chinese university students from six different universities in central China (Tang, Byrne & Qin's, 2018). The study utilised the Chinese version of the Symptom Checklist-90-revised (SCL-90-R) (Derogatis, 1975), and reported that in the previous 12 months, 40.7% of participants reported symptoms of psychological distress and 7.6% reported suicidal behaviour. Guo et al.'s (2013) longitudinal study interviewed students from high schools in Beijing and followed up three years later with the same 1547 students after they had entered universities. They reported that psychological symptoms were common in the university population and identified that moving away from their homes and families is a very stressful experience for Chinese students.

The frequent reporting of high psychological distress levels and generally lower levels of mental health amongst Chinese tertiary students wherever they study, is consistently linked to Chinese culture. The following section will provide background to the integral role culture and societal influences play in understanding mental health and help-seeking behaviour of Chinese international students.

Chinese cultural beliefs

Chinese culture and philosophies are fundamental within Chinese society, encouraging a collective harmony, the restraint of emotion, and perseverance to achieve happiness. Amongst these cultural influences, collectivism, Confucianism, Taoism and mianzi are among the most significant, impacting both the mental

health and help-seeking behaviours of Chinese people.

Collectivism

'No matter how big, one beam cannot support a house' - Chinese Proverb

Hofstede (1991), an eminent researcher of culture, defined culture as “the collective programming of the mind which distinguishes the members of one group or category from another” (p.5). His research led to the development of five dimensions of power that determined the differences between cultural groups. These dimensions were individualism versus collectivism, power distance, masculinity versus femininity, uncertainty avoidance and long-term orientation versus short term normative orientation. Within Eastern societies, and most notably China, the most distinctive difference when compared to Western cultures is that of individualism and collectivism. Individualist cultures, common in Western societies including NZ, value competition, independence, and self-expression. Collectivist cultures, common to Chinese culture, tend to have the group as the fundamental element, valuing cooperation, interdependence, and self-control (Feng, 1991; Triandis, 1995).

Characterised as highly collectivist, Chinese culture has the underlying belief that those in the same group are interconnected and group effort is required for their wellbeing, harmony and prosperity (Leung, 2010). The belief is deeply rooted in Confucianism, the most fundamental belief in Chinese society. Confucius believed that harmony would occur if each member of society complied with the values of humanity and morality and understood and performed their rank in society (Huang & Charter, 1996). The accepted terminology defined five structured relationships, with four reflecting hierarchy. These include sovereign and subordinate, father and son, husband and wife, elder brother and younger, and the final relationship, between friends, considered to be equal. The expectation for the superior in each of the relationships is to act in accordance with the principles of kindness, gentleness, righteousness and benevolence. Conversely, the inferior in the relationships is to act in accordance with the principles of filial piety, obedience, submission,

deference and loyalty (Hsaio, 2005; Liu, 2000). The highly valued principle of filial piety refers to the obligation, respect and duty a child has to their parents (Liu, 2009), which is repaid through academic excellence and avoiding bringing disgrace to the family (Chow & Chu, 2007). The importance of filial piety is described in the Chinese proverb *“of all virtues, filial piety is the first”*.

The long traditions of these hierarchical relationships remain significant for Chinese people with courtesy, good relationships and communications considered vital to maintaining a healthy mind and beneficial emotions (Kolstad & Gjesvik, 2014). To maintain harmony, Confucius encouraged the restraint of emotion and the avoidance of conflict (Yip, 2005), influencing the way stress is managed in an individual's life (Yue, 1993), and in the subsequent choices made when seeking help. Psychological problems are believed to be rooted in a lack of self-discipline or weakness of character, the result of a lack of harmony in relationships (Liu, 2018), or through not practising the true principles (Chen-Kuendig, 2017).

Taoism

‘Silence is a source of great strength’ - Chinese Proverb

Taoism, another significant influence in China, aims to be at peace with whatever life brings through the avoidance of impulsivity or actions against an individual's best interests (Yan, 2017). Taoism encourages people to live a life free from troubles, caring without taking advantage of others, not showing off mental capacity (Chen-Kuendig, 2016) and existing in a state of nothingness in order to achieve absolute happiness or to be mentally healthy (Yip, 2005). Those with mental illness are considered powerless to change or improve their situation (Chen-Kuendig, 2016) and must endure, maintaining a state of nothingness, to return to their mentally healthy state (Yip, 2005).

Mianzi 面子 (face)

'Do not wash your dirty linen in public' - Chinese Proverb

The concept of 'face' is a core social value within Chinese culture, emphasising the importance of avoiding shame or embarrassment. The saving of face is considered particularly significant within an individual's immediate family, ensuring the preservation of the family and the family name (Yan, 2017), bringing honour through academic or career success (Tseng & Wu, 1985; Li & Lin, 2014) and preventing reputational damage. Often considered the most fundamental to Chinese culture, the value of family is seen as the underlying unit of society (Tseng & Wu, 1985).

Saving face is caring less about one's own personal pride or ego, and more about how they are viewed by others. To prevent shame and to save face, Chinese students will avoid direct confrontations (Wang & Greenwood, 2015), repress feelings rather than speaking out, and turn to their family and close friends for emotional support, rather than more formal sources (Yan, 2017). Guilt and shame are common indicators of psychological distress and are often considered symptoms of mental illness (Hsiao, Klimidis, Minas & Tan, 2006).

The collective impact of Chinese cultural beliefs remains highly influential in the lives of Chinese international students. However, while aiming to maintain a well-functioning society through emotional restraint and harmonious relationships, cultural beliefs often negatively impact on their mental health and wellbeing through not sharing concerns or seeking help (Chen & Mak, 2008)

Chinese society

Education in China

'A nation's treasure is in its scholars' - Chinese proverb

The Chinese education system is a highly competitive, exam-oriented environment with a strong focus on academic performance and little emphasis on leisure or other extracurricular activities (Forbes-Mewitt & Sawyer, 2009). In accordance with traditional Chinese cultural values, the education system is notable for its large power distance between student and teacher, beginning at primary school and continuing throughout university. Hofstede's (2008, cited in Dongmei & Xing, 2012) description of the high-powered environment within education notes the teacher-centric environment where great respect is paid to teachers who are never publicly challenged or criticised.

The pressure to succeed academically begins at a young age for Chinese students with academic excellence deeply rooted in Chinese culture. Educational success allows students to express filial piety to their parents through positive family reputation (Liu, 2009). This strong emphasis on academic achievement by Chinese parents can be attributed in part to China's one-child policy (Han et al., 2013), with 77% of Chinese only-child households acknowledging that repaying their parents was their motivation for learning (Chen, 2012), with scholarship bringing great honour to the family (Yan & Berliner, 2009). Parental pressure towards education is a commonly reported stressor among the only child of Chinese families and is linked strongly to having only one child. Students with the perception of high parental expectations towards education were more likely to show higher psychological distress than those perceiving low parental expectations. Children are also reported to be greatly impacted by their family environment, with higher levels of depression among those with poorer relationships with their parents (Chen et al, 2013). Yeh et al. (2006, cited in Su, 2012), noted in their study of adolescents in China that filial piety is a predictor of anxiety and depression which in turn predicts low academic achievement.

Academic achievement is considered to be more strongly related to effort than to natural ability (Stevenson et al., 1990), an attitude supported by the Chinese proverb: *'Genius comes from hard work and knowledge depends on accumulation'*

Academic pressure is known to have a detrimental effect on mental health and has been reported as the greatest source of stress for nearly 70% of Chinese youth (China Youth Social Service Centre Report, 2008, cited in Chen & Glaude, 2017). Among Chinese secondary students, academic pressure was the most predictive variable for depression and was strongly associated with suicidal ideation (Su et al., 2012; Ye, 2006).

University in China

The competition to gain a place in a university in China is fierce with nearly 10 million Chinese students sitting the Gaokao, China's National College Entrance Examination, each year. Of this number, less than 50% will achieve a place at university, with higher results placing students at more prestigious universities (Li, 2017).

Students attending university usually live on campus away from their parents and friends, often for the first time in their lives (Li et al., 2014a), a factor that is reported to be a significant stressor for Chinese students (Guo et al., 2013). Students live in dorms, with six or more room mates, and these students will make up their 'form class' or 'class cohort' that they will stay with for the duration of their degree. The class cohort system is very focussed on peer support (Lehmann, A. 2018, December, conference proceedings, ISANA, 2018).

Although the university system is designed to be supportive, most Chinese students have spent their school years being strictly monitored by their institution and their family and find the relative freedom challenging (Guo, 2013). Mental health issues and loneliness are common in this population, and it is not unusual for students who study at university to develop mental health disorders when they begin to live independently (Hou & Zhang, 2007).

Since 2004, most universities in China have developed mental health services, the majority of which continue to have a strong focus on mental health promotion and education (Yang et al., 2015). However, despite the growing demand for student

counselling in Chinese universities, limited resourcing is made available for individual counselling (Holm-Hadulla & Koutsoukou-Argyraki, 2015), leaving a significant unmet need among this population.

Mental health and counselling

Mental health disorders were estimated to affect over 100 million Chinese in 2009 (Yuen, 2013, cited in Chen, 2018), and are the leading cause of disease burden in the country (Zhang & Zhao, 2015). Within Chinese society, there is growing demand for mental health support (Lin, 2018), with the government making slow improvements in this area with the passing of the “Mental Health Law of the People’s Republic of China” in 2013 (Shao, Wang & Xie, 2014).

Counselling was first introduced to China in the 1980s and the profession has developed slowly since this time (Goh et al., 2007). Initially, counselling focussed on Western methods and values where therapists would support clients to solve their own issues (Higgins, 2008). However, there were significant discrepancies between this approach and Chinese culture (Wu et al., 2016), where counsellors are seen as authority figures giving advice (Higgins, 2008). Counselling in China is now more directive and comparable to coaching, where individuals seek immediate advice and guidance to solve mental health problems (Lin, 2018).

The seeking of help has long been identified as an adaptive coping strategy, resulting in reduced stress levels and improved psychological functioning among university students (Vidourek, King, Nabors & Merianos, 2014). Help-seeking literature typically refers to formal sources of support for mental health issues, including counselling and health services, but the term has been used in a more inclusive way to refer to the use of both formal and informal supports, including family, friends, religious leaders (Barker, 2007) and self-help technology. The following section reviews literature on help-seeking, including barriers and strategies to improve help-seeking.

Chinese students and help-seeking

Among Chinese university students, traditional beliefs and mental health stigma ensure that family, and particularly parents, are the most frequently used help-seeking source (Chang, 2008; Yan, 2017). As previously discussed, parents play a pivotal role in their child's life and are usually the main source of support for any issues, including stress (Yan, 2017). Veness (2016) reported that Australian universities should ensure parents are provided with information on life in the host country and the services and support available, to increase their understanding of the experiences of their child. Friends are also a significant source of help-seeking for Chinese international students at an Australian university, with Lu, Dear, Johnston, Wootton and Titov (2014) reporting that 86% of those who sought help for psychological distress, turned to their friends.

Help-seeking preferences have been explored in the Chinese international student population in NZ (Ho, Li, Cooper & Holmes, 2007). Consistent with previous studies, students were reported to rely more heavily on co-nationals or family for support and were more reluctant to seek help from formal sources of support than other international students.

Chinese students studying in China, and those studying abroad are reported to have low rates of professional help-seeking. A large-scale multi-year cohort study of 13,085 first year university students in Beijing reported overall help-seeking numbers were very low, with 2.61% to 6.61% of participants seeking help from the university's professional counselling centre (Liu et al., 2017). Low rates of access were also reported a sample of Chinese international students at an Australian university, with only 11% responding that they had sought professional mental health support to manage psychological distress (Lu et al, 2014).

Cramer's (1999) model of willingness to seek counselling was developed through the work of other researchers, Cepeda-Benito and Short (1998) and Kelly and Achter (1995). Cramer identified a path analysis model that explained the relationship between the variables of social support, level of distress, attitudes toward counselling, self-concealment, and an individual's willingness to seek

counselling. High psychological distress and a more positive attitude towards counselling were shown to be a positive predictor of the willingness to seek counselling and higher levels of distress were related to impaired social support and higher levels of self-concealment (Leech, 2007). Liao, Rounds and Klein (2005) extended Cramer's model adding acculturation (behavioural acculturation and adherence to Asian Values) with Asian and Asian American college students and found significant support for the positive predictability of psychological distress towards willingness to seek counselling.

Despite the work on Cramer's model, inconsistent results have been reported on access to counselling when psychological distress levels are high. Participants in Liu et al.'s (2017) study were more likely to seek help from the college psychological counselling centre when their mental health issues increased. However, Li et al. (2017) found Mainland Chinese college students with a higher level of psychological distress reported less positive attitudes toward seeking professional support.

Whilst the majority of research investigating help-seeking among the Chinese international student population has showed they have limited intentions to seek help through formal sources, including counselling, Han et al.'s (2013) online survey of Chinese students in the USA provided contrasting results, reporting that 95% of participants were open to the idea of accessing counselling at the university, compared to 8% who were unlikely to use the service. However, they noted that only 4% of survey respondents had ever used the service, despite high levels of depression recorded in the survey.

Although seeking help for psychological reasons is highly stigmatised among the Chinese student population, research has highlighted seeking help for academic supports and web-based interventions as alternatives which may make help-seeking more acceptable. Help-seeking for academic reasons is often considered more socially acceptable among this population and promoting the benefits to study is recommended (Galligan, 2016; Tracey et al., 1986).

Internet based support has been reported to be a promising intervention among Chinese international students. A study of Chinese tertiary students in Australia reported that 77% of participants would be willing, or might be willing, to consider internet options if they faced serious psychological distress; however, face to face treatment was preferred as this may have been due to unfamiliarity with web-based options (Lu et al., 2014). Web based self-help interventions have been considered a potential approach to overcome stigma as a barrier to treatment (Levin, Krafft & Levin, 2018), with many interventions available at no cost (Chan, Farrer, Gulliver, Bennett & Griffiths, 2016). Tertiary students are considered good candidates to receive web-based self-help treatments (Ryan, Shochet & Stallman, 2010), due to their high internet usage and often a greater ease of access to the internet through their institutions than the general population (Gordon, Juang & Syed, 2007).

Barriers to help-seeking

The reluctance of individuals to seek help for mental health difficulties has been reported as one of the most significant challenges to the prevention and treatment of mental health issues (Rickwood & Thomas, 2012). Delayed help-seeking is reported to lower the efficacy of intervention approaches (Rickwood, Deane & Wilson, 2007), delay diagnosis and treatment and lead to poorer psychological outcomes (Cornally & McCarthy 2011; Tse, 2004). For students, delayed help-seeking may impact academic achievement (Eisenberg, Gollust, Golberstein & Hefner, 2007), which for international students, may affect their ability to hold a student visa.

Despite the challenges and stress international students face, numerous studies report they underuse mental health services (Li & Lin, 2014; Rickwood et al., 2007) and this is particularly notable for Asian and Chinese students. Lau and Takeuchi (2001) reported the cultural conflict between traditional Asian values and Western therapy approaches, an individual's cognitive appraisal of their psychological problems, and the shame and stigma associated with mental illness all contributed to their poor uptake of mental health supports. Researchers have also noted the discrepancy between the prevalence of mental health disorders and those who seek professional psychological help (Rickwood & Thomas, 2012; Stallman, 2008)

in the tertiary student population. Lu et al.'s (2014) study of Chinese international students at an Australian university, reported common barriers to seeking professional help for mental health problems as being limited knowledge of available mental health support, the belief that their distress was not severe enough to need treatment, and the lack of knowledge of symptoms of psychological distress. Chinese students have been reported to be more likely than other ethnic groups to delay help-seeking until they are in crisis (Forbes-Mewett & Sawyer, 2009). Researchers have detailed many reasons for the underutilisation of help-seeking, particularly that of counselling which fall predominantly into two overlapping categories – cultural and practical barriers.

Cultural barriers

Cultural beliefs have a significant impact on an individual's perception of counselling, often exposing a conflict between traditional cultural values and the need to seek help. These beliefs continue to influence the Chinese international student population throughout their time living abroad.

Mental illness stigma

Stigma, in the form of both public and self-stigma, have been reported as significant barriers for Chinese people needing mental health support (Mak & Davis, 2014). The stigma attached to mental illness requires symptoms of distress to be hidden and help-seeking outside of the immediate family discouraged (Huang & Charter, 1996). Within Chinese culture, the belief that mental illness is a personal failure ensures that symptoms remain private for as long as possible in an attempt to save face and preserve harmony (Wong, Tran, Kim, Van Horn Kerne & Calfa, 2010), in contrast with Western counselling that encourages emotional expression and self-disclosure (Sue & Sue, 2003). Among the Chinese student population, saving face leads to a preference towards using informal sources of support rather than professional services (Lu et al., 2014), which in turn leads to poor service utilisation (Choi, Sharpe, Li & Hunt, 2015; Liu, 2018; Zhang, 2007).

Family attitudes

In Asian societies, the attitudes of family and social networks are the most commonly reported barrier to the utilisation of support by Chinese students (Chang, 2008). Culturally based attitudes may lead to avoidance or significant delay to access professional support, which may only occur when the concern is no longer able to be managed within family networks (Chang, 2008). Individuals receiving professional psychological support may face discrimination, leading them to develop negative attitudes toward accessing mental health services (Hou & Zhang 2007).

Adherence to Asian cultural values

The strength of adherence to Asian cultural values supposedly relates to less positive attitudes toward seeking professional help and reduced willingness to seek formal mental health support (Kim & Omizo, 2003; Wong et al., 2010). Chen and Mak (2008) investigated mental health help-seeking among college students from different backgrounds and found that Western influences were associated with a greater willingness to seek help. One aim of Li et al.'s (2018) study of Australian tertiary students was to investigate links between Australians' help-seeking and adherence to Asian values. Although the Chinese student numbers in the study were small (13%), adherence to Asian values associated negatively with intention to help-seek and use supports.

Cultural values have a significant influence on students' view of therapy and the appropriateness of Western counselling style. Chen and Lewis' (2011) study of East Asian students in the USA reported that participants held mainly negative views of therapy before they came to the country. These views were culturally derived and included believing participating in therapy was a sign of weakness and worrying that others would treat them differently. Many perceived going to therapy was an escape from responsibilities, preferring to get support from their own family and friends. The cultural appropriateness of western-style counselling was commented on by researchers at a US university (Smith & Khawaja, 2011), noting that disclosure of personal issues may be seen as a sign of weakness (Mori, 2000). Additionally, a

more directive style of counselling has been reported as a preference for Chinese students (Exum & Lau, 1988; Li, 2016).

Perceived severity of symptoms

Chinese students are unlikely to consider their psychological problems as severe enough to require seeking professional help (Tracey, Leong & Glidden, 1986). Li (2016) reported Asian students' reluctance to burden others with their problems led to underutilisation of psychological services. However, the importance of the attitudes of significant others towards accessing mental health support was noted to have a positive impact on an individuals' seeking of professional support (Goh et al., 2007; Mak & Davis 2014).

Mental health literacy

Mental health literacy was defined by Jorm (1997) as the "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (p. 182). Individuals with lower mental health literacy are reported to show greater mental health stigma (Eisenberg et al, 2009) and find communicating mental health information more difficult (Jorm, 2007) which in turn, acts as a barrier to help-seeking (Goh et al., 2007). Lower mental health literacy is also linked to early termination of mental health treatment and a reliance on inappropriate coping strategies (Jorm, 2012).

Research assessing levels of mental health literacy among student groups has found that international students have lower levels of mental health literacy than their domestic counterparts (Clough et al., 2018; Shea & Yeh, 2008). Although there is a scarcity of published research on the levels of mental health literacy among the Chinese international student population, it is reported to be low amongst this group of students (Reavley, 2010). A lack of recognition of mental health problems has been noted by Chinese medical students in Australia (Hickie, 2007) and, also in Australia, Chinese international students with symptoms of psychological distress, who reported that their level of distress was not severe enough to warrant treatment (Lu et al., 2014).

Gulliver et al.'s (2018) study reported that teaching staff at universities were more likely to be approached by a student for help with their mental health if the staff member had higher mental health literacy. The researchers recommended ensuring academic staff have mental health training and feel confident to support students to provide a gateway to professional support.

Practical barriers

Lack of service knowledge

A commonly reported barrier to Chinese students accessing support at their institution is a lack of awareness of the services provided and how to access them. Yan's (2018) study of Chinese students in the US reported that counselling services were not well known or well utilised, with students more likely to turn to families or other Chinese students for help. Yan recommended further outreach by counsellors and for institutions to develop workshop and counselling programmes specifically for international students to support adjustment to a new culture. They also recommended counsellors should continue to develop their awareness of Chinese culture. Lu et al. (2014) also identified the lack of service knowledge as a barrier to counselling in their study of Chinese students in Australia. In NZ, a lack of knowledge of on-campus resources was reported as a significant limitation to accessing help for Chinese students (Ho et al., 2007). Study participants had limited knowledge of, and rarely used, services and facilities provided at their educational institutions and only a small proportion indicated that they had used services to meet their pastoral needs.

English competency

Competence or confidence with the English language directly affects international students' help-seeking behaviours (Hurny, 2007) and is an often-cited barrier to seeking help from counselling services (Ang & Liamputtong, 2008). Concerns can include being misunderstood by native English speakers, misunderstanding others, being unable to describe fully their thoughts or feelings, shame at perceived language difficulties (Le, 2018; Lu et al., 2014), and not understanding assessment, treatment and conditions (Ho et al., 2003). The recruitment of Chinese-speaking

counsellors has been recommended at tertiary institutions, in an effort to reduce barriers and provide culturally and linguistically appropriate support (Han et al, 2013; Veness, 2016).

Significance of the study

Tertiary students are psychologically vulnerable population and their mental well-being is of concern to institutions and governments in NZ and the rest of the world. Internationally, research focussing on Chinese students and their mental health is limited, particularly given the vast numbers of students travelling offshore to study and the subsequent concerns raised about their mental health. NZ-focused research remains particularly sparse in this area, with very little available information on the mental health and help-seeking behaviours of Chinese international students in NZ. Exploring the prevalence and severity of psychological distress, help-seeking behaviours and perceived barriers to accessing professional support among the Chinese international student population in NZ is therefore vital to ensure educational institutions gain a better understand of the mental health of this group of students.

The setting of the study

Victoria University of Wellington (Victoria) is one of eight universities in NZ and in 2017, was ranked in the top 2% of the world's 18,000 universities in the QS World University Ranking (Victoria Annual Plan, 2017). In 2017, Victoria had a total student population of 22,273 and an international student population of 3,548, which made up approximately 15.5% of the total student numbers. Of this number, Chinese students were the largest group of international students, with 838 enrolled in study in 2017, at all educational levels from the pre-degree English Proficiency Programme through to PhD level. Victoria University of Wellington (Victoria), as with most NZ universities, provides free counselling to all students to support their study. Statistics from the university's Student Counselling service report very low use of the service by Chinese students with only 36 (4% of the enrolled Chinese population) who identified themselves as Chinese utilising the service in 2017 (M. Liang, personal communication, 24 February 2018).

Victoria was selected as the setting for the current study primarily due to the researcher's employment at the university, connections within the institution and the ease of information gathering in this environment. Consideration was given to developing a multi-site survey at other universities in NZ, but the complexities of gaining multiple ethical consents from other institutions was considered impractical for a project of this level.

Summary and aims

This chapter has provided the background context and relevant research of the mental health and help-seeking concerns of Chinese students. In NZ and throughout the world, the international student market is growing, with students from China the highest proportion of international students in many countries. Chinese students studying in China and those studying abroad are reported to have high levels of psychological distress and subsequent low levels of help-seeking. Cultural beliefs play a major role in the response of Chinese international students to stress or more serious mental health issues, reported to be related to academic stress, social isolation, culture shock and language difficulties.

Help-seeking for Chinese international students is particularly impacted by Chinese cultural values and beliefs, which include mental illness stigma or 'loss of face', family attitudes to help-seeking, adherence to Asian cultural values, the perceived severity of symptoms and poor mental health literacy. Practical barriers include limited service knowledge and English language competency.

Research into the topic of mental health and help seeking among the Chinese international student population is limited but growing and currently there is no research assessing their mental health needs in NZ. To meet this need, the current study has three main aims. First, to gather baseline data on the levels of psychological distress of the Chinese international population at Victoria. Second, to determine who or what Chinese international students turn to for help when stressed. Third, to gather information on support service utilisation by Chinese international students at the university.

Chapter 2: Methodology

Introduction

The main aims of this mixed methods study were to gather baseline data on the levels of psychological distress of Chinese International students at Victoria, to explore their help-seeking behaviours during times of stress, and to examine their preferences in relation to health service or support provision. Chapter 2 begins with detailing of the research questions the study was built upon. The methodological approach utilised in the study is then discussed, including justification of the choice of study design and descriptions of similar studies utilising mixed methods. The demographic measures examined in the study are defined with detailed discussion of the K10 and additional measures utilised in studies with similar subjects. The measures taken to ensure the study was valid, reliable and trustworthy are presented, followed by the ethical and cultural considerations in the development and implementation of the study. The population of interest and the recruitment measures utilised are then detailed. The chapter ends with details of the data collection and analysis of both quantitative and qualitative data, laying the groundwork for the results that are then presented in Chapter 3.

Research questions

This study examined the level of psychological distress of Chinese international students at Victoria, their help-seeking behaviour, and their preferences in health service or support provision. The research questions contained within the survey provide data that were able to be assessed quantitatively or qualitatively. Specifically, using quantitative methodology, the study explored:

- What is the baseline level of psychological distress in Chinese students studying at Victoria University of Wellington?
- Who or what do Chinese students turn to for help when stressed?
- What are the barriers to the use of Student Counselling?
- Which services and resources are used by Chinese international students and what are the barriers to their use?
- What university services and resources are students aware of?
- What university services and resources are currently utilised?

Using qualitative methodology, the study explored:

- What would Chinese students do to decrease their stress during their transition to university?
- What advice would current Chinese students give to new Chinese students who may be coming to study at Victoria University for the first time?

The literature review informed the design of the current research study and a mixed methods design, utilising a web-based cross-sectional survey, was selected to address the research questions. Mixed methods research is defined by Creswell (2015) as “an approach to research in the social, behavioural, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems” (p. 2). Mixed methods research emerged in the 1950s when researchers began to combine qualitative and quantitative methods in a range of fields (Creswell & Plano Clark, 2011), with the approach developing more formally in the late 1980s (Creswell, 2003; Creswell & Plano Clark, 2007). Johnson and Onwuegbuzie (2004) have since nominated mixed methods research design as “the third research paradigm in educational research” (p. 14).

Mixed methods researchers work within a pragmatic worldview, collecting numeric and descriptive data, analysing data using both statistical and content analysis and integrating the implications gathered from the qualitative and quantitative findings (Tashakkori & Newman, 2010). Quantitative methods come from a postpositivist world view, answering ‘what and how many’, while qualitative methods come from a constructionist or narrative tradition, building a deeper meaning from participants views (Creswell & Plano Clark, 2011). The underlying assumption of mixed methods research is that the combination of qualitative and quantitative approaches gives a more robust understanding of the topic of interest (Creswell & Plano Clark, 2011), decreasing the weaknesses and growing the strengths (Johnson & Onwuegbuzie, 2013) than either approach in isolation. Mixed methods research is

considered appropriate when there is a need to provide greater exploration and explanation of a research problem (Creswell, 2003).

Working within a health field with a population from a different culture, it was important that the method chosen for the current study had been tested and found appropriate. Mixed methods have been increasingly used within health sciences research (Morgan, 1998; Tariq & Woodman, 2013). Mixed methods have also been used with a range of different cultural and ethnic groups (De Gayne, Oh, So, Haidermota & Lee, 2014; Li, Wong & Toth, 2013) and Bartholomew & Brown (2012) reported that mixed methods are an important means to ask “complex psychological questions without imposing Western norms and ignoring contextual factors” (p 177). Additional strengths of the method are the ability to gather a larger pool of data, and therefore provide greater evidence to develop an understanding of a phenomenon than separate methodologies alone, enabling a broader set of research questions to be answered than through one method in isolation (Creswell & Plano Clark, 2007).

However, concerns have been expressed about the mixing of methods due to paradigm conflicts and assumptions between quantitative and qualitative methodologies (Morgan, 1998), and whether the mixing of methods adds any value than those gained through quantitative and qualitative research independently (Creswell, 2011). Additional concerns also include the requirement for a researcher to be competent in both qualitative and quantitative methodologies to mix them appropriately, and the increased cost and time that is needed for mixed methods research (Johnson & Onwuegbuzie, 2013). In order to minimise practical concerns relating to cost and time in the current study, strategies and supports were in place to ensure minimal impact on the research process. This included the study being cross-sectional, with quantitative and qualitative data gathered concurrently on only one occasion, meaning that no additional intervention was needed to gather additional data. Furthermore, both supervisors were quantitative and qualitative researchers, respectively, and supported the development and analysis of the two distinct research methodologies, negating any concerns of the requirement for the researcher to have expertise in both approaches.

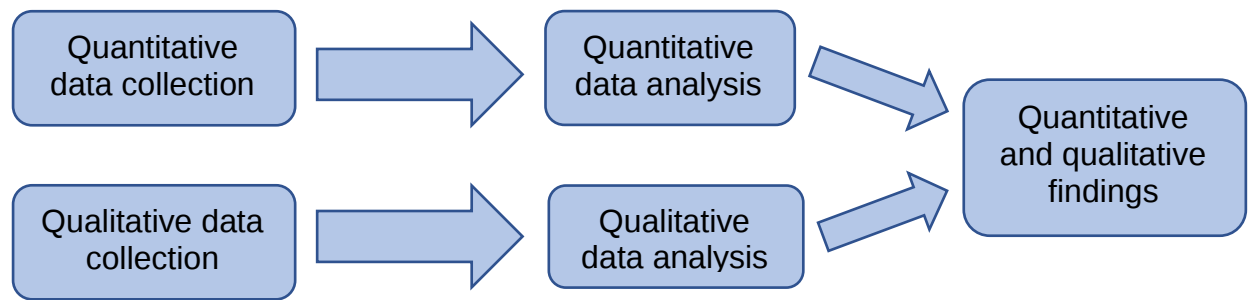
Research design

Within mixed methods research, Creswell and Plano Clark (2007) describe four design categories: convergent parallel design (also known as the triangulation design), exploratory design, explanatory design and an embedded design. For the current study, a convergent parallel design was selected. The design is reported to be the most commonly used mixed methods approach (Creswell et al., 2013) “to obtain different but complementary data on the same topic” (Morse, 1991, p122).

A convergent parallel design aims to compare, contrast and expand on the results of quantitative analysis through the collection of qualitative data (Creswell & Plano-Clark, 2007). This design was selected due to the efficiency and timeliness of collecting both sets of data within one survey and the clear distinction between quantitative and qualitative methods, requiring the mixing of methods only at the analysis stage of the research. A noted challenge with the convergent parallel design is managing different sample sizes (Creswell & Plano Clark, 2007). This was mitigated with the current study as the same sample is used for both the qualitative and quantitative questions. The merging of different sets of data in a meaningful way has also been stated as a concern for researchers, however ensuring the same concepts are being addressed, as they are in the current study, minimises these concerns (Watkins & Gioia, 2015).

When planning mixed methods research, Creswell et al. (2003) recommended that consideration should be given towards the priority, implementation, and integration of the design. Priority is defined as which method, quantitative or qualitative, is given more weight, implementation is the order of data collection (sequential or concurrent), and integration is the stage during the research when data is merged. To address this, the current study utilised qualitative and quantitative questions to answer similar yet complementary questions (Palinkas, 2014), while collection and analysis of qualitative and quantitative data was performed independently and within the framework of traditional quantitative and qualitative designs (Creswell & Plano Clark, 2011) with the discussion drawing together the analysis arrived at for both strands through the process of triangulation (Figure 1).

Figure 1. Convergent parallel design data model



Using the established notations of capital letters (for priority) and plus sign (for concurrent) (Morse, 1991), the priority in this study was given to quantitative data which was collected concurrently with qualitative data: QUAN + qual. The qualitative strand enhanced the primary quantitative strand in overlapping and distinct aspects of the areas of investigation (Greene, Caracelli & Graham 1989).

A review of mixed methods literature found a number of studies in related fields that had used a convergent parallel design. De Gayne et al. (2015) used a concurrent mixed method design of to explore healthcare experiences of Asian Indian immigrants in the US, where the researchers collected quantitative data via a survey and qualitative data via a focus group, with both sets of data given equal status and priority. The quantitative and qualitative data were combined during the interpretation phase, with the aim to better understand the healthcare experiences of the subjects. Researchers reporting that findings from the analyses produced both overlapping and different views of their experiences. Finally, using an identical method to the current study, Li et al. (2013) explored Asian international students' willingness to seek counselling at a US university. The researchers used an online survey to ask predominantly quantitative questions with one qualitative question asked at the end of the survey. The researchers hoped that "the qualitative findings would complement the quantitative findings by providing additional insights" (p 4). Although no further information was provided on their methodology, quantitative and qualitative data were collected concurrently, analysed separately, with the results merged together in the discussion, demonstrating a convergent parallel design.

The current study

The study involved delivery of a cross-sectional survey using a self-assessment questionnaire over a 4-week period (31 July 2017 – 31 August 2017). The quantitative component of the survey was comprised of rating scales, rank order scales and multiple-choice questions. The qualitative component consisted of four open-ended short answer questions delivered concurrently with the quantitative questions in the survey.

Gathering information on the mental health of participants requires a study design that ensures a high level of confidentiality for participants. This is particularly important amongst Chinese given the cultural values that underlie intense mental illness stigma (Yang et al., 2013), as mental health concerns that could impact negatively on the individual or their family are not disclosed beyond the immediate family for fear of shame and showing personal weakness (Yan, 2017). Given these cultural values, consideration was given when deciding on an appropriate data gathering method to ensure students' confidence in survey anonymity. For the current study, other methods including focus groups and interviews were considered, but due to the sensitivity of the topic and the challenges of obtaining a useful response rate an anonymous survey was considered the most appropriate data collection method.

Data collection via web-based surveys is becoming an increasingly common mode for conducting survey-based research (Albaum & Smith, in Mesch, 2012) due to cost effectiveness, ease of analysis, familiarity (Huck, 2012), and the ability to reach large numbers of respondents (O'Leary, 2010). Although there has been some concern of the suitability of using open-ended questions in surveys to gather qualitative data, Coderre, Mathieu and St-Laurent (2004, cited in Mesch, 2012) found this to be an appropriate method.

Surveys also allow clear guidance on the anonymity of the research project through Participant Information Sheets and assume agreement that the participant has read and understands the guidance when they start the survey. They are a commonly

used method to gather highly sensitive mental health related data from tertiary students (Wong et al., 2016) and have been used previously with Chinese international students to investigate mental health issues (Han et al., 2013; Lu et al., 2014). Tourangeau & Yan (2007) reported concerns about the use of sensitive questions in research, where questions may be considered intrusive or where the threat of disclosure (a third party being informed of their answers), potentially leading to non-response rates and item non-response. The self-administration of questions through an online survey (Tourangeau, Conrad & Couper, 2016) and assurances of confidentiality are techniques that improve response rates (Saleh & Bista, 2017; Tourangeau & Yan, 2007); this reinforced the decision to proceed with the proposed method.

An email with web-based survey was selected as the most appropriate method to gather data for this study. Qualtrics software (Qualtrics Research Suite, Provo (UT): Qualtrics LLC; 2017) was used to develop and distribute the survey due to ease of access and researcher familiarity. The software allows participants to complete the survey at a time convenient to them, pause, and return to the survey at a later date. It also allows participants to skip questions they preferred not to answer and to discontinue the survey at any time.

Consideration was given to maximising survey response rate. Using 'best practice' guidelines from Qualtrics (2017), the length of the survey was kept to a minimum to avoid substantial drop off in completion rates. Participants were advised the survey would take between 10-15 minutes to complete. Care was taken with the timing of the current study to minimise conflict with other surveys to be sent to Chinese international students. This was done to mitigate survey fatigue of the population, which has been known to negatively affect response rates (Porter, Whitcomb & Weitzer, 2004).

The survey questions used in this study were developed by the researcher and supervisors. A pilot of the survey was considered but as all Chinese students at Victoria were included in the study population using them to pilot the survey would render their data ineligible for inclusion in the research. An alternative pilot sample

was identified by the researcher and four Chinese staff working in the international sector, and who had been students at Victoria previously, agreed to pilot the survey. They were able to provide feedback on the wording, survey length, layout and any translation inconsistencies and cultural interpretation that was relevant to the success of the study. Their feedback resulted in a small number of translation edits.

Measures

The final survey consisted of 20 questions in four sections, presented sequentially:

1. Demographic questions
2. Kessler 10 psychological distress questionnaire
3. Help-seeking preferences and student services
4. Transition to study in NZ and advice

Demographic questions

The survey began with nine multi-choice demographic questions. Demographic questions included age, gender, marital status, number of siblings, home nation, level of study, how long they have lived in NZ, and current accommodation type. These specific questions were asked to allow between-group comparisons of the impact demographics had on other measures.

Kessler 10

The K10 (Kessler & Mroczek, 1992) was developed as a brief measure of non-specific psychological distress in the anxiety-depression spectrum, and it was used as the measure of psychological distress in this survey (Kessler et al., 2002). The K10 has been used in studies assessing the psychological distress of international students previously (Leahy et al, 2010; Stallman, 2008 & Stallman & Shochet, 2009), has been translated into Mandarin (Kessler, 2001), and has been validated with Chinese international student populations internationally showing excellent internal consistency with Cronbach alpha scores of $\alpha=.91$ (Wang, et al., 2013) and $\alpha= 0.94$ (Lu et al., 2014), respectively. Good validity scales are important to ensure the K10 measures what it is meant to measure. Additionally, factor analyses have revealed that the ten variables of the K-10 possess a strong single factor structure

(Fassaert et al., 2009), ensuring when reduced into principal components they account for most of the variance in the original variables.

Other measures of psychological distress that have been utilised with tertiary populations were considered for this study, including the 58 item Hopkins Symptom Checklist (Derogatis et al,1974), the DASS (Lovibond & Lovibond, 1995) and the BDI (Beck et al., 1961). However, these assessments were considered too lengthy for the survey which was designed to take a maximum of 10 minutes to complete.

The Patient Health Questionnaire-9 (PHQ-9) (Spitzer et al., 1999) was also considered as a potential study tool. It asks how often individuals have been bothered by a range of symptoms, however the final question of the assessment asks participants to indicate how often they have had “thoughts that you would be better off dead or of hurting yourself in some way”. As the survey was anonymous, there would be no method of contacting students who had responded that they had these thoughts to perform a suicide risk assessment, therefore the PHQ-9 was not selected for use in the current study.

The K10 uses a 10-question rating scale to assess the frequency of non-specific psychological distress in the previous four weeks. The self-report measure gives five response options for each of the 10 questions – (1) none of the time; (2) a little of the time; (3) some of the time; (4) most of the time and (5) all of the time, giving a maximum score of 50, indicating severe distress, and a minimum score of 10, indicating no distress (Andrews & Slade, 2001).

Cut off scores for the K10 differ, with no universally agreed groupings currently in practice (Australian Bureau of Statistics, 2012). Andrews and Slade’s (2001) scoring method was based on the recommended treatment dependent upon level of distress. Respondents’ total K10 scores were categorised into one of three groups, with scores between 10-15 requiring no intervention, scores between 16-29 requiring self-help and scores between 30-50 requiring professional help. A later improvement on this scoring, utilised in Australian Health Surveys 2007-2008 (Australian Bureau of Statistics, 2012), used four categories to indicate the

prevalence and severity of psychological distress. Using this approach, a score between 10-15 indicates no to low distress; scores between 16-21 indicate moderate distress; scores between 22-29 indicate high distress, and scores above 30 indicate very high distress. The cut off scores utilised in the current study were the same as those used in the 2007-2008 Australian Health Surveys (Australian Bureau of Statistics, 2012) and enabled comparisons to be made in related international studies (Cvetkovski et al., 2012; Lu et al., 2014).

Stress, help-seeking preferences and student services

Three measures, designed by the researcher and her primary supervisor, were used to explore participants' help-seeking preferences. In the first measure, participants were provided with a list of pre-determined support options and were asked to select their top three preferences for support when stressed. They were then asked to select their three least preferred options for support from the same list. The second measure asked participants whether they had accessed Student Counselling while attending Victoria. For participants who had not used the service, a pre-determined list of barriers was provided, and participants were asked to identify as many options as were relevant. The final measure asked participants to identify which Victoria support services they were aware of, and which services they had used during their time at university. All measures provided an option for 'other' responses allowing participants to input their own answer.

In the final section, participants were asked two qualitative free-text questions exploring what they would do differently to reduce their stress during their transition to Victoria and to identify the advice they would give to new Chinese students who may be coming to study at Victoria University for the first time. No attempt was made to specify whether the source of participants' stress was academic, personal, cultural, financial or other cause of stress. Rather, the question was kept deliberately broad allowing participants to interpret stress as they saw fit.

Validity and Reliability

Validity in quantitative research refers to the extent to which an instrument measures what it intends to measure (Creswell & Plano Clark, 2011), with reliability referring to the consistency of the findings in a study and how able the results are to be replicated. Strategies utilised in the current study to ensure validity was the choice of mixed methods methodology, which was considered an appropriate methodology and method for this study. The respondents in the study were not pressured in any way to make certain choices in the survey, rather they were free to select the answer most appropriate to their situation.

Trustworthiness

Within qualitative research, measuring 'trustworthiness' is a frequently utilised approach to assess methodological rigor of a study. Lincoln and Guba (1985) describe four components to ensure trustworthiness: credibility, confirmability, transferability and dependability. These four components are defined, with descriptions of strategies utilised in the current study are discussed.

Credibility is ensuring the findings are true and accurate and triangulation was utilised in this study, whilst confirmability is ensuring the findings are based on responses from participants, not researcher bias or motivation. The process of triangulation involves verifying evidence from multiple sources (Creswell, 2007) and results in a richer, more trustworthy description of findings. The findings of this study were based on the analysis of data gathered from quantitative and qualitative questions, merged during the discussion. Transferability shows that the findings may be applicable in other contexts, including other tertiary settings. To ensure generalisability of the current study, thick descriptions were provided to allow conclusions to be drawn that would be transferable to other times, settings, situations, and people. Dependability refers to the consistency of findings and the ease with which these could be repeated. Throughout this thesis, the researcher has ensured that all details of the research process have been clearly outlined, allowing another researcher to follow the steps taken to in order to replicate the study.

Ethical and cultural considerations

The ethical considerations examined in this study included the identification and examination of any potential conflict of interest, ensuring the protection of participants, and ensuring the rights of participants were upheld through informed consent and confidentiality of information.

Research projects involving students at Victoria require Human Ethics Committee approval from the university. Approval was granted on June 2nd, 2017 (Ethics Approval: 24430) (Appendix A). Approval to access the email addresses of Chinese international students for this research was granted by the Assistant Vice Chancellor (International) on April 21, 2017 (personal communication, J. Innocente-Jones, April 21, 2017).

Ensuring the protection and safety of potentially vulnerable participants is vital when planning and implementing mental health research. To ensure participant wellbeing and to support any issues that may have arisen due to the survey, participants were provided with the link to connect with Victoria's Student Counselling team. Additionally, at the completion of the survey, participants were automatically redirected to the Victoria Wellbeing page for further information on initiatives the university had developed to support wellbeing.

Participants must be given the freedom to take part, or not to take part, in research projects. The consent process must be clear, providing all information to allow an informed choice to be made. For this study, a Participant Information Sheet (PIS) (Appendix C) which was attached to the emails sent to participants. They were informed that their participation in the survey was both anonymous and voluntary and that their anonymity would be assured throughout the study. Further clarity was provided around the collection and storage of data, who would have access to the data, and how the data would be stored and/or disposed of after the study was completed. Collected data from the survey was kept on a password-protected computer in a locked office accessible only to the researcher. At the conclusion of the study, all data was destroyed.

The background of the researcher also ensured robust and ethical delivery of the study. The researcher is an Occupational Therapist with extensive experience in the mental health field in a range of settings. She had previously worked at Student Counselling at Victoria, and at the time of sending the survey was the Manager of the International Student Support Team at the university. The researcher's role was student-facing and involved regular face to face contact with international students through orientations, pastoral care and events and she was cognizant that she would be known to many of the student cohort. To mitigate any ethical concerns of the researcher role, emails containing the survey were sent via the generic Victoria International 'vi-support' email address, from which students regularly receive information and newsletters from the Victoria International office.

Population of interest

Chinese international students were selected as the target population due to the large population at Victoria and the limited uptake of professional support observed by the researcher. Eligible participants for this study were Chinese international students currently enrolled at all levels of study. Students from all age groups were included in this study, with the youngest Chinese student at Victoria aged 17 years, 7 months of age through to the eldest, aged 65 years, 9 months. Chinese students holding residency visas are considered domestic students in NZ and were excluded from this study.

The preferred email addresses of all currently enrolled Chinese international students were retrieved from Victoria International databases on 31 July 2017, timed to ensure all newly arrived students had completed enrolment in order to maximise recruitment of the population of interest. An email was sent to all students on 31 July 2017, with a link to the Participant Information Sheet and the Qualtrics survey. All study information (including information sheets and survey questions) was provided in English and Mandarin.

Recruitment

At the time of surveying, 838 Chinese international students were enrolled at Victoria. Student details were collected from the Victoria International internal recording system which is linked to the main Victoria enrolment system. All enrolled international students who had indicated they were of Chinese ethnicity were sent the survey with introductory email to their preferred email address. The survey email was sent from the generic vi-support@vuw.ac.nz email address which is used regularly to provide advice, information and support to international students. The Chinese Students' Association at Victoria were also contacted by the researcher and messages were sent by Evelyn He, President of the Association to Chinese international students via their We Chat group on Monday 31 July 2017, encouraging them to complete the survey.

Prior to beginning this research project, a power analysis was performed using a sample size calculator (SurveyMonkey, 2018) which determined the minimum number of participants required for the study. The number required was 204, with the total population of Chinese international students at Victoria of 838 using 90% power and 5% level of significance (O'Leary, 2010).

Data collection and analysis

The study had a single-phase data collection and following the closing date of the survey on 31 August 2017, all data was downloaded from the Qualtrics online platform. Quantitative data was analysed using the Standard Package for Statistical Sciences SPSS (IBM SPSS Statistics for Windows 25, IBM Corp., Armonk, NY) software for statistical analysis and qualitative text was analysed using NVivo Pro software (Version 11, QRS International, Melbourne, Australia). Statistical support for data analysis was obtained from Dr Lisa Wood (Victoria's Statistical Consultant).

Analysis of quantitative data

Prior to data analysis, the frequencies of each variable were checked to identify missing values or outliers and to ensure the accuracy of data. Analysis of all questions is described by research section below.

Questions 1-9 contained the demographic responses and descriptive statistics (frequencies and percentages) were calculated for each variable.

Questions 10 and 11 contained the K10 assessment. During data collection, it was observed that one of the K10 questions had been omitted during construction of the online Qualtrics survey. At that stage of the project, it was deemed too late to add the missing question and not possible to contact persons who had already completed the survey, so data collection continued. For the remainder of this study, the measure will be known as the K9 when referring to the current study.

To ensure the K9 continued to have a high level of internal consistency, despite the missing question, a Principal Component Analysis was performed to determine the correlation between the nine variables. Factors with an eigenvalue greater than one were extracted, confirming that the remaining nine items in the K9 scale measured the one underlying construct of psychological distress. The nine-question scale had a high-level of internal consistency, as determined by a Cronbach's alpha of 0.906. A Spearman's rank-order correlation was used to measure the strength and direction of the relationship between each pair of questions. There was a positive correlation between all 9 questions of the K9, with mean $r_s = .507$ (range: $r_s = .395 - .656$), all $p \leq 0.001$.

The adjusted mean for the K9 data was calculated utilising the recorded mean from the data of 21. This score was 46.67% of the maximum total score of 45. To allow the mean score of the current study to be comparable to other studies utilising the K10 which have a maximum total score of 50, this number was multiplied by the 46.67%, mean score of the K9, giving an adjusted mean score of 23.33. Independent t-tests were used to compare the K9 mean score of the current study to the K10 mean score of other similar studies.

The commonly used cut-off points for the K10 psychological distress categories (Australian Bureau of Statistics, 2012), were adjusted to compensate for the missed question in the K9. The adjusted scores were calculated to be: 9-14 = 'no to low

distress', 15–18 = 'moderate distress', 19-25 = 'high distress' and 26-45 = 'very high distress'.

The relationship between K9 mean and the variables of age, gender and length of time participants had lived in NZ were tested using independent samples t-test with $p > 0.05$. Levene's Test of Equality of Error Variance was then used to test the assumption of homogeneity of variance. A QQ plot and box plot were used to assess if residuals were evenly distributed followed by a one-way ANOVA determine if there was a difference in the K9 mean dependent on the length of time participants had lived in NZ, and to determine if there was a difference in K9 mean dependent on age or gender using $p > 0.05$.

T-tests were used to assess the relationship between the K9 mean and the variables of age, gender and whether participants had siblings. Levene's Test of Equality of Error Variance was run, and the assumption of constant variance was met. Residuals were approximately evenly distributed by visual inspection of QQ plot and box plot. The level of significance was set at $p > 0.05$.

Questions 12, 13, 14, 16 and 17 asked about participants' stress, help-seeking and services at Victoria. Descriptive analysis was used with the frequency and percentage of participants' selections calculated.

Analysis of qualitative data

The Qualtrics survey instrument simultaneously collected data on the four qualitative research questions (Research Questions 15, 18, 19 and 20) and responses to 'other' questions. These questions and survey responses from 'other' responses were analysed using thematic analysis. Thematic analysis encompasses "identifying, analyzing and reporting patterns (themes) within data" (p. 6, Braun and Clarke, 2006). A thematic analysis approach is reported to be useful when little is known about the research topic, with themes emerging from the data. The approach can be deductive, where themes are identified and informed by the researchers' theoretical perspective; it can also be inductive, where the researcher is open to

being informed by the data and observing unexpected insights (Braun & Clarke, 2006). The latter was selected for this study as no predetermined theory or framework was utilised to analyse data.

Braun and Clarke's (2006) six-phase approach was followed for analysis of qualitative responses. The first step in the analysis was to become familiar with the data through repeated reading, making notes of initial ideas or repeated patterns that emerged across the data. Codes were then identified that may be related to the research questions. The codes and data were then examined to identify preliminary themes. This included data that related to the research questions and data that was not directly related. The next step was to review themes by checking them against the data to ensure they were answering the research questions. Themes were then discussed with the secondary supervisor and further refined. A more detailed analysis of the themes was then conducted to generate robust definitions and names. This phase involved developing a comprehensive analysis of each theme and their contribution to the understanding of the data. Finally, the findings from the analysis were discussed in the final report. Themes were described and supported by direct verbatim quotes from participants.

Conclusion

Chapter 2 provided the rationale for the methodological choice and lays the foundation for the analyses and interpretation that will be discussed in subsequent chapters. Following an overview of the research questions this study will address, this chapter has outlined the research methodology, including research design, and the justification of utilising a mixed research methods approach. Also discussed are the concerns with the design and the steps taken to minimise these concerns. Relevant research using a similar design to the current study was then highlighted. The research measures were outlined followed by the methods used to ensure validity, reliability and trustworthiness of the study, followed by ethical and cultural considerations. The study setting, population and recruitment of participants were then detailed. The chapter ended with the data collection procedures and methods used to analyse both quantitative and qualitative data collected in this study.

Chapter 3 will report on the main survey findings from the Chinese international student population at Victoria.

Chapter 3: Results

Introduction

This chapter presents findings of the survey, beginning with information on the response rate and discussion about management and treatment of missing data. The summary of quantitative data begins with a description of the sample and summary demographics, followed by results examined in order of survey questions, beginning with examination of the measure of psychological distress. Where appropriate, responses were assessed by socio-demographic variables to determine whether there were variations in dependent variables between different groups. Responses to questions on help-seeking, access to student counselling and awareness and use of other student services are then reported on. Qualitative responses to open-ended questions are then analysed independently in order of survey questions, followed by analysis of questions where 'other' was provided for additional responses. The chapter ends with an overall summary of findings and conclusion.

Response rate

The survey was sent to the personal email addresses of all 836 Chinese international students that were enrolled at Victoria on 31 July 2017 via Qualtrics. The email included an invitation to participate in the study and a link to the survey. Of the 836 emails sent, seven bounced (i.e. the accounts were inactive or email addresses incorrect), giving a total population of 829 who received the invitation to participate. A total of 223 participants (26.9%) initiated the online survey over a 4-week period (31 July 2017 – 31 August 2017). Three reminders were sent to the 829 email addresses via Qualtrics following the initial survey invitation. The number and percentages of responses received following each invitation are displayed in Table 1.

Table 1

Survey response rate

Date survey link was opened	Responses <i>n</i> (%)
Initial invitation (31 July 2017)	106 (48%)
First reminder (6 August 2017)	52 (23%)
Second reminder (13 August 2017)	32 (14%)
Final reminder (17 August 2017)	33 (15%)
Total	223 (100%)

The majority of respondents ($n=214$, 96%) took less than 30 minutes to complete the survey, and of this group, the mean response time was 7.34 minutes (range: 1.29 - 28.41 minutes). A small number of responders ($n=9$, 4%) took greater than 30 minutes to complete the survey and perhaps began the survey and completed it later (range: 33.49 minutes - 06 days, 21 hours, 40 minutes and 5 seconds).

Immediately following the close of the survey, a random-number generator was used to randomise the 223 responses for the prize draw (Random.org, 2017). The five participants selected were contacted by email and advised their \$20 'Vic Books' voucher could be collected from Victoria International reception or sent to them at their postal address.

Data cleaning

After data screening, 18 cases were removed from analysis. These were participants who did not answer any questions ($n=3$), participants who only answered the demographic questions ($n=7$), participants who identified they had already completed their study at Victoria and were not currently enrolled ($n=3$), and participants identifying they were from Hong Kong ($n=5$). Hong Kong's unique colonial history has led to the adoption of a more western lifestyle than that of Mainland China (Chen & Mak, 2008); the very different political systems and socioeconomic environments of the two countries informed the decision to exclude students from Hong Kong. The remaining 205 students in the sample group made up 24.7% of the population of Chinese international students at Victoria.

Prior to conducting statistical analysis, the data was examined for errors or missing data. Frequencies of demographics and the K9 were evaluated to ensure no scores were outside the possible range. Missing values were found in the K9 ($n=2$) and gender ($n=2$) and the mean imputation procedure was utilised (Tabachnick & Fidell, 2007) to replace missing values. The procedure was considered appropriate given the proportion of missing values was small, the data remains on the same scale and is therefore easy to interpret (L. Woods, personal communication, 12 September 2017).

Summary of quantitative data

Participants' demographic information

Survey questions 1-8 contained demographic information of the participants including gender, age, their level of study, where they were from, relationship status, whether they had siblings, the length of time they had lived in NZ and their type of accommodation. These demographic characteristics of participants were summarised in Table 2 and discussed as follows.

Among the 205 eligible participants, all reported their gender. There were more female participants than male participants (61.5% versus 38%), with one participant identifying as gender neutral ($n=1$, 0.05%). The youngest participant was 17 years old ($n=1$, 0.5%) with 40 participants aged 26 or over (18.9%). The mean age of respondents was 22.5 years old. Remaining demographics are displayed in Table 2.

Table 2

Demographics of study sample

	Number (%)
Gender	
Male	78 (38)
Female	126 (61.5)
Gender neutral	1 (0.005)
Age	
17 or under	1 (0.5)
18	6 (2.9)
19	11 (5.3)
20	31 (15)
21	37 (18)
22	24 (11.7)
23	23 (11.2)
24	15 (7.3)
25	18 (8.7)
26 and over	39 (18.9)
Current level of study	
English Proficiency Programme	25 (12.2)
Undergraduate	122 (60)
Study Abroad/Exchange	2 (1)
Postgraduate	42 (20.5)
PhD	13 (6.3)
Marital status	
Single	124 (60.5)
In a relationship	66 (32.2)
Married	14 (6.8)
Prefer not to say	1 (0.45%)
Siblings	
No	155 (75.6)
Yes	50 (24.4)
Time in NZ	
Less than 3 months	26 (12.7)
3-6 months	22 (10.7)
6 months-1 year	29 (14.1)
Greater than 1 year	128 (62.4)
Accommodation	
University hall	56 (27.3)
University homestay	17 (8.3)
Private flat/board	132 (64.3)

The variables of gender, age and level of study of the sample were found to be representative of the total population of Chinese international students at Victoria

($n=836$) on the survey send date (Table 3). Other variables were unable to be compared as the majority of information gathered through the survey is not recorded in university enrolment information.

Table 3

Sample and population comparison

	Sample n (%)	Population n (%)
Gender		
Male	78 (38)	352 (42.1)
Female	126 (61.5)	485 (57.9)
Gender diverse	1 (0.5)	0 (0)
Age		
17 or under	1 (0.5)	2 (0.2)
18	6 (2.9)	22 (2.6)
19	11 (5.3)	54 (6.5)
20	31 (15)	133 (15.9)
21	37 (18)	123 (14.7)
22	24 (11.7)	112 (13.4)
23	23 (11.2)	95 (11.4)
24	15 (7.3)	68 (8)
25	18 (8.7)	57 (7)
26 and over	39 (18.9)	171 (20)
Current level of study		
English Proficiency Programme	25 (12.2)	103 (12.3)
Undergraduate	122 (60)	514 (62)
Study Abroad/Exchange	2 (1)	26 (3)
Postgraduate	42 (20.5)	147 (17)
PhD	13 (6.3)	47 (6)

The following section provides an analysis of the four quantitative research questions. All quantitative questions provided a space for ‘other’ comments as a free-text option. These responses were analysed in the summary of findings of ‘other’ responses in this chapter (p. 17).

Psychological distress

Survey questions 9 and 10 used the K9 measure of psychological distress to answer the question: What is the baseline level of psychological distress in Chinese students studying at Victoria University of Wellington?

As discussed in the previous chapter (Methodology, page 42-43), researcher error in the planning of the survey resulted in the omission of the sixth K10 question:

During the last 30 days, about how often did you feel restless or fidgety? The remaining nine questions of the K9 scale were assessed to have a high level of internal consistency as determined by a Cronbach's alpha of 0.906. K9 scores ranged from 9-39, the adjusted mean score was 23.33 and standard deviation, 6.97. The commonly used cut-off points for the K10 psychological distress categories (Australian Bureau of Statistics, 2012) were adjusted to compensate for the missed question in the K9 and were calculated to be: 9-14 = 'no to low distress', 15-18 = 'moderate distress', 19-25 = 'high distress' and 26-45 = 'very high distress'.

Results showed 14% of participants were likely to have no to low psychological distress ($n=29$); 26% were likely to have moderate psychological distress ($n=54$); 32% were likely to have a high psychological distress ($n=67$) and 27% were likely to have very high psychological distress ($n=55$). Psychological distress levels did not differ significantly as a function of age (categorised into 18–25 years old and above 26 years old) ($t(3) = 0.843$, $p=0.16$), gender ($t(202) = 0.512$, $p=0.61$) or whether participants had siblings or not ($t(173) = -1.551$, $p=0.123$). A one-way ANOVA was conducted to determine if the K9 mean was different dependent on the length of time participants had lived in NZ. Levene's test was performed and constant variance was assumed. There was no statistically significant difference between groups ($F(3,201) = 1.753$, $p=0.157$).

Independent t-tests compared the K9 mean of the current study to K10 means of other similar studies. Results showed no significant difference in mean scores when compared with Chinese students in Australia (Lu et al., 2014) ($M=23.96$, $SD=9.03$); $t(347)=0.7349$, $p=0.4629$) and China (Li et al., 2017) ($M=23.55$, $SD=8.68$); $t(1331)=0.3433$, $p=0.7314$; (Zhang et al., 2018) $M=23.02$, $SD=6.31$; $t(1603)=0.6479$, $p=0.5171$. However, statistically significant differences in K10 scores were recorded between the current study and other studies of the general tertiary student populations in Australia (see Stallman, 2010; $M=20.24$, $SD=6.14$; $t(6682)= 7.0631$, $p<0.0001$; and Leahy et al., 2010; $M=22.05$, $SD=7.02$; $t(1158)= 4042.46$, $p<0.0001$).

Results were compared with K10 distress levels of 15-24-year-olds from the general NZ population (Kvalsvig, 2018). The mean score was not provided for this study, but cut-off scores were compared to Chinese international students and are displayed in Figure 2.

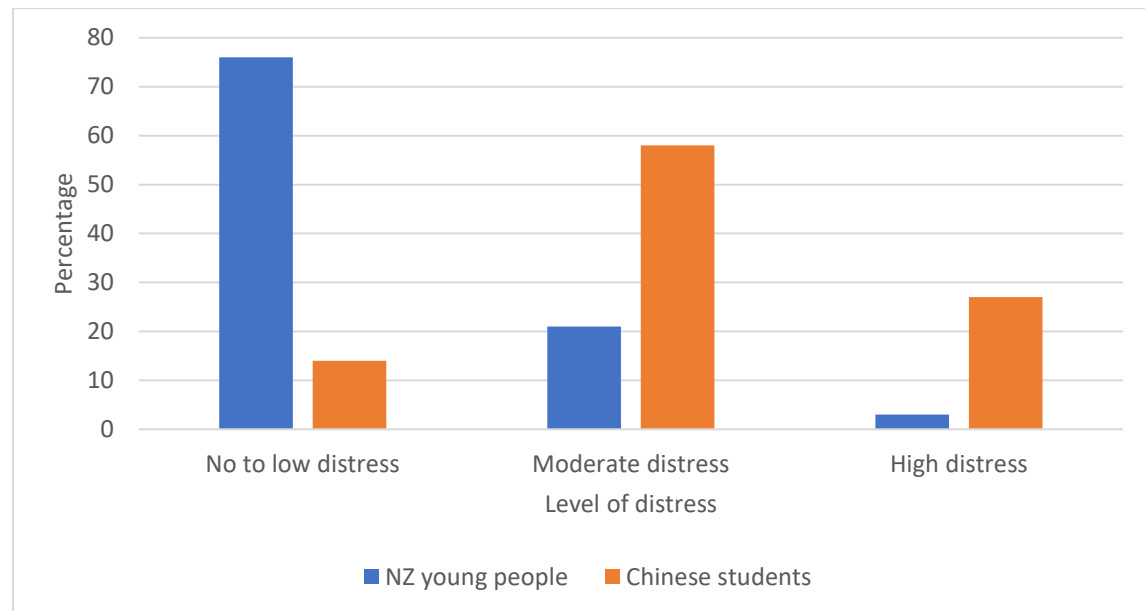


Figure 2: K10 score comparison between Chinese international students and NZ data from Kvalsvig, 2018

Stress and help-seeking

Survey question 11 asked participants to rank their top three sources of support from a pre-determined list to answer the question: Who or what do Chinese students turn to for help when stressed? A free text space was provided for additional responses not already provided and these responses are analysed in the qualitative section. Survey question 12 then asked participants to rank their three least preferred options for support from the same pre-determined list.

Participants ($n=118$) ranked their parents as their most preferred individual source of support, but parents were also ranked as the source participants would be least likely to turn to when stressed ($n=74$). Of this number, 28 students ranked their parents as a source they would and would not turn to for help. Friends were the

most preferred group of support, split between Chinese friends in NZ ($n=106$), NZ friends ($n=61$), international friends in NZ ($n=59$) and overseas friends ($n=54$) were also ranked in the top three options for support. Academic staff were the least preferred source of support, ranked in the bottom three by 87 participants. Other family members ($n=78$); parents ($n=74$) and the internet ($n=74$) were also ranked in the top three for least preferred support options. Full results of both questions are displayed in Figure 3.

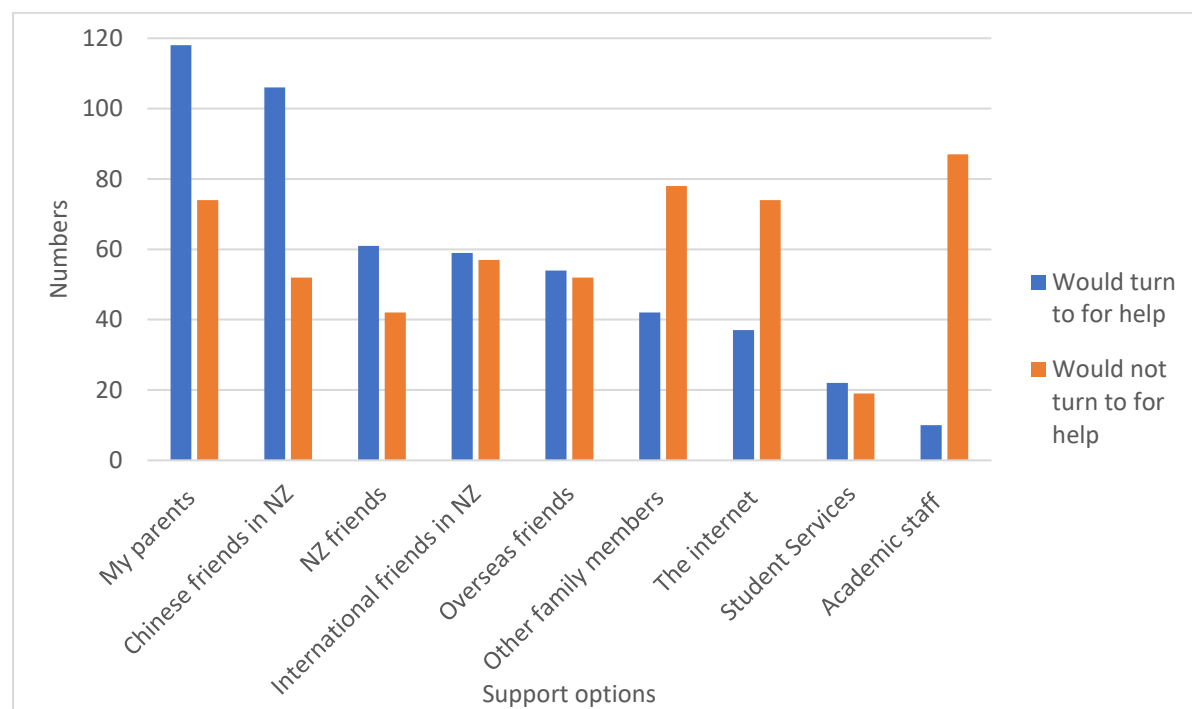


Figure 3. *Who Chinese students would or would not turn to for help.*

Student Counselling use and barriers

Question 13 asked: Which services and resources are used by Chinese international students and what are the barriers to their use? They were provided with a pre-determined list of potential barriers with a free text response option if needed and were able to select as many options as preferred. Responses are detailed in Table 4.

Table 4

Student Counselling use and barriers

	Number (%)
I have used Student Counselling	26 (12.3%)
I would not because I'm not confident in my ability to speak English	35 (16.6%)
I have not heard of Student Counselling	55 (26.1%)
Culturally, I would not be comfortable speaking with a counsellor	18 (8.5%)
I do not know how to contact Student Counselling	38 (18%)
I have had no need to use Student Counselling	82 (38.9%)
I would need to be very unwell to use Student Counselling	44 (20.9%)
Other	11 (5.2%)

Of respondents who reported moderate to very high psychological distress on the K9 (n=176, 85%), only 22 (12.4%) had sought help from Student Counselling during their time at Victoria. Similarly, only four participants (13.8%) among those with low psychological distress (n=29, 14%) had sought help from the service.

Awareness and use of Victoria's support services

Questions 15 and 16 asked participants to report their awareness and use of other support services at Victoria. They were provided with a pre-determined list of services and were also provided with a free text response option. Participants were able to select as many options as preferred or provide details in the free text section. Results are detailed in Figure 4.

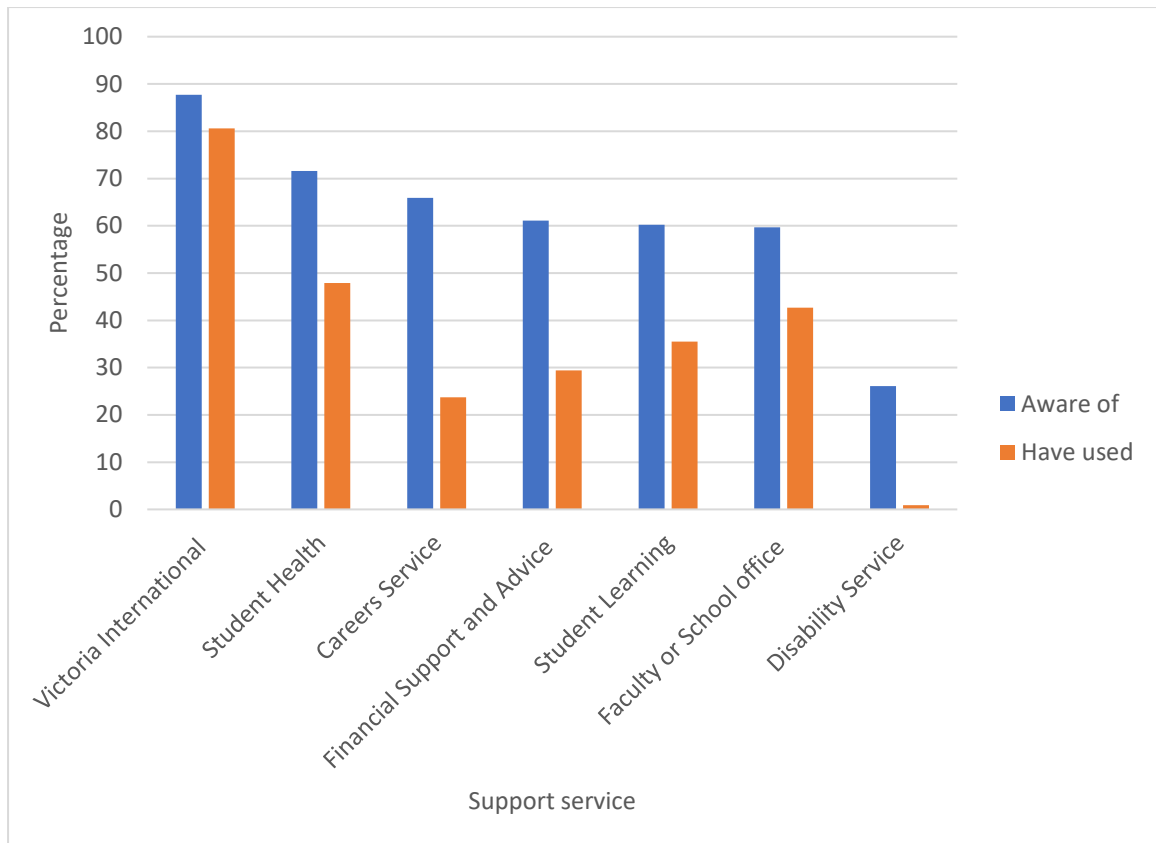


Figure 4. *Which support services are students aware of/have used.*

Summary of qualitative data

Qualitative questions were designed to gain a deeper understanding of aspects of the quantitative data, particularly in relation to help seeking and access to university support services. Four open-ended questions were delivered simultaneously with the quantitative survey questions. Additionally, space for 'other' comments was provided for quantitative questions. These responses will also be analysed in the summary of findings of 'other' responses. A small number of participants responded in Mandarin (n=33, 16%).

Improving access to Student Counselling

Survey question 14 asked participants: We are interested to know what would make Student Counselling at Victoria University more accessible to you. Please write down what would make you more likely to use this service. A total of 50 responses

were provided to this question, with major themes and number of responses displayed in table 5.

Table 5

Q.14 Major themes

Major theme	Number of responses
Better promotion of the service	18
Mandarin-speaking therapists	18
Improve anonymity	5

Participants ($n=18$) recommended various methods of promotion to ensure the service is better known by students.

“I don't know there is a option for students, I guess if I could easily get the information about it, I would be happy to join it”

“More advertisement and send emails to students from time to time”

Eighteen participants commented that offering counselling in Chinese may improve access to the service by Chinese students.

“Provide Chinese speaking service”

Participants commented on the cultural differences between western Student Counselling staff and Chinese students.

“I have only met with two psychologist, one is a westerner who doesn't understand my thoughts and feelings and that increased my illness, I don't blame her because we have different life experiences and backgrounds, but at the same time it's not fault to be ill.”

“Local people but can speak fluent Chinese, understand both cultures and better had same situation before, and know how to through the difficulty of study and life.”

Additional services

Survey question 17 asked participants to suggest services that could be useful, that are not currently provided at Victoria. A total of 18 responses were received for this question.

Three participants commented on support to assist with understanding NZ culture and making friends.

“I reckon apart from studying, I am very willing to participate activities that enable me to understand the local culture and student lifestyle...”

“Friendship gathering”

“Assimilating into the local culture has been lacking among China students; a lot of time the locals feel that Chinese do not mingle (keep to themselves), Chinese feel don't know how to assimilate”

Two participants felt that better advice on course choices would be useful.

“guidance on selecting courses”

“Guidance on students’ selection of courses aspect”

Decreasing stress on transition

Question 18 asked participants to think about their arrival to study at Victoria and if they would do anything differently to decrease stress if they had their time again. Major themes and number of responses are displayed in table 6.

Table 6.

Q.18 Major themes

Response theme	Number of responses
Get involved	43
Focus on study	17
Improve English	10
Time management	9
Use of supports	8

A total of 118 responses were provided. Getting involved in university and community activities was suggested by participants as a method of decreasing their transition stress on arrival at Victoria. They noted their lack of knowledge about opportunities to get involved on arrival and needing to make an effort to meet new friends.

“I will try to get involved from the beginning. Go to student learning to participate workshops. Attend vic plus programme. So many of these I did not really know when I came here”

“go out and social have more friends, meet new people. Friends can make you feel less lonely.”

Respondents indicated that they would have done more planning and studied harder if they had their time again.

“Studying harder and harder”

“Doing some preparation for every classes.”

Participants commented on their lack of ability and confidence in speaking English. For one student, the decision to take a particular class, requiring speaking in a group setting was challenging.

“I would not take a class that requires the attendance of discussion group every week. That made me really nervous and uncomfortable. I wasn't good at English, I hope the coordinator or someone else have warned me about that.”

“I guess as for not a native speaker, English speaking is always the first challenge.”

Advice to new students

Survey question 19 asked participants to give advice to new Chinese students who may be coming to study at Victoria University for the first time. A total of 90 responses were received and response rates are summarised in Table 7.

Table 7.

Q. 19 Major themes

Response theme	Number of responses
Connect with others	32
Improve English	15
Study	13
Ask for help	10

The strongest theme encouraged new students to get connected by meeting new friends, not just those from China ($n=33$).

“Not be shy, go out and make some friends. Most of students are very friendly”

“Communication with more international students”

“Get out of your comfort zone to know more friends from various countries”

Also seen as important was to improve and be confident using English.

“practise speaking, possess communication skills”

“Master English well”

Participants also encouraged students to seek support with some specifying where to access help.

“Email your lecturer or course coordinator as soon as you have a problem.”

“Make more friends, seeking them for help if there are problems, or approach the school student counsellors”

Summary of findings of ‘other’ responses

Quantitative questions with additional spaces for ‘other’ comments are analysed in this section.

Stress

A small number of participants ($n=16$) provided additional responses when asked about who they turn to when stressed. Ten participants responded that they would utilise student services when stressed, with Student Counselling the most popular choice. Some participants ($n=5$) reported that they would keep their stress to themselves:

“I never ask for help when I feel under pressure”

Other participants noted they would turn to other supports, including their partner or church, or they would use activities to help when stressed.

Student Counselling use and barriers

Eleven participants responded with additional comments in the free text section. Five participants acknowledged their ability to manage stress without the need for Student Counselling.

“I reckon I can calm this type of emotion myself, approaching student counselling can’t really solve the practical problems”

“I feel like it is not necessary”

Participants also commented on the lack of information about Student Counselling

“I have been here for 5-6 years, I don’t know there is a student counselling”

“The website said it stops”

Overall summary of findings

This section outlines the major findings of the both quantitative and qualitative aspects of the study. Demographics of the sample closely matched the demographics of the population of Chinese international students at Victoria, in age, gender and level of study. The majority of students were from one child families and had lived in NZ for longer than one year.

Participants reported high levels of psychological distress in the current study which did not differ dependent upon age, gender or length of time participants had lived in NZ. There were no significant differences in K10 scores when compared to Chinese tertiary students studying in Australia and in China, however there were significant differences when compared to similar age groups in the NZ and Australian general population and domestic students in Australia. Participants showed clear preference towards utilising their friends and parents as help-seeking sources, with academic staff, student services and the internet the least preferred sources. Student Counselling had been utilised by a small number of participants and of those that had not used the service, the largest group were those that had felt they had not needed the support. Participants also noted cultural and linguistic barriers to approaching Student Counselling and qualitative responses showed a lack of knowledge of the service and how to access it, and a lack of understanding of what counselling is. At least 50% of participants had knowledge of most support services at Victoria. Participants provided clear recommendations to improve access to Student Counselling, including better promotion of the service and access to

Mandarin speaking counsellors. A small number of respondents noted that additional services to assist the cultural transition to NZ and providing course advice would be beneficial. Getting involved was the most frequent suggestion to decrease stress on transition to university and this was supported by advice to new students which recommended getting connected with others. Improving English, studying hard and asking for help were also recommended.

Chapter 4: Discussion

Introduction

This study was undertaken to gather preliminary data on the prevalence of psychological distress among Chinese international students at Victoria. Also investigated were their help-seeking preferences when stressed, their engagement with counselling, or barriers preventing engagement with counselling support, and their knowledge and use of additional university support services. Participants' views on managing stress and their advice for newly arrived Chinese students were also explored.

This discussion has a similar order as the results chapter and merges the quantitative and qualitative data. The chapter begins with a discussion of survey engagement, followed by a review and comparison of K10 results with other populations and discussion around these findings. Stress and help-seeking results follow with preferred and non-preferred options reviewed and discussed. Counselling access and barriers are reviewed and compared, followed by participants' use of other student services at Victoria. Participants' advice to new students and how to decrease stress on transition and their recommendations to new Chinese international students are then discussed. Study limitations are then considered, along with implications for practice and recommendations for future research. The chapter concludes with a summary of key information.

Survey engagement

The response rate from this study ($n=205$, 24.7%) was just above the minimum number required calculated using a power analysis ($n=204$). Although adequate, this response rate is lower than other surveys with a 37% response rate for the i-barometer survey of all international students at Victoria (Victoria International, internal statistics, 2018) and a 35.7% response rate in Han et al.'s (2013) study of Chinese international population at an American university.

Strategies utilised to enhance the response rate of the current study, included providing notification of survey closing dates and sending of reminders, with the

response rate more than doubling after the initial send out of the survey. As recommended through Qualtrics (2017), the survey length was kept to a minimum encourage engagement. The mean response time for 96% of participants was 7.34 minutes, falling below the 10-15-minute estimation given to participants, and well below the 12-minute maximum recommended by Qualtrics.

Psychological distress

Using the K10 as a measure of psychological distress, this section discusses participant responses to research question one: What is the baseline level of psychological distress in Chinese students studying at Victoria University of Wellington?

Tertiary study has consistently been associated with elevated levels of psychological distress which are significantly higher than the general population (Larcombe et al., 2016; Leahy et al., 2010; Lovibond & Lovibond, 1995; Stallman, 2010). International students, although known to face additional stressors including differences in language, culture and the loss of their social networks, have shown similar levels of psychological distress as their domestic counterparts (Khawaja & Dempsey, 2008; Skromanis et al., 2018). However, these challenges are considered to be more extreme for students from China due to the vast cultural differences they experience when transitioning to western countries (Liu, 2009).

Results from the current study show concerning levels of psychological distress among Chinese international students at Victoria. In the four weeks prior to responding to the survey, 59% of respondents reported experiencing high or very high levels of distress (mean K10 score = 23.33). This result is consistent with Lu et al.'s (2014) study of Chinese international students in Australia where 54% of respondents reported high or very high levels of distress (mean K10 score = 23.96). Also consistent are comparisons with studies of Chinese students attending tertiary institutions in their home country. There were no significant differences between the mean K10 score of these studies and the current study, indicating that elevated psychological distress is a common feature of the Chinese tertiary student experience, regardless of where they study.

Although this hypothesis needs to be interpreted with caution due to the small number of studies highlighted, consideration needs to be given to the consistent pressures on Chinese tertiary students and the common experiences they share, independent of where they study. It is possible that these experiences, most notably Chinese cultural values and upbringing, living away from family and the known challenges of studying at tertiary level, may be more impactful than whether a student is living abroad or in their home country.

Consistent with international literature (Lu et al., 2014), the levels of psychological distress of participants in the current study did not differ significantly as a function of age, gender or the length of time the participant had lived in NZ. Notably, the challenges of acculturation, often reported to more significantly affect international students at the beginning of their transition to a new culture, are not evident in the current study, with no difference in distress levels between those who have newly arrived in NZ and those that have been in the country for over a year. This supports previous research that has suggested international students may not suffer from increased psychological distress during their initial transition (Wang et al., 2012).

The high levels of distress in the current study and the lack of evidence of determining factors that contributed to participants' distress is of concern, limiting the ability to predict when a Chinese international student may be at higher risk of psychological distress, and enabling institutions to plan how to best support them.

Stress and help-seeking

This section discusses the quantitative and qualitative survey questions relating to stress and help-seeking. Specifically, the three questions were:

1. When you are stressed or feel under pressure, who or what do you turn to for help?
2. When you are stressed or feel under pressure, who or what do you not turn to for help?
3. Thinking about your arrival in Wellington and your first period of study at Victoria University, what would you do differently if you had the time again, in

order to decrease any stress you may have experienced during that transition?

Traditional cultural values also strongly influence the help-seeking behaviours of Chinese international students, requiring the management of hardship without complaint and the maintenance of harmony by keeping concerns private or within the family (Shea & Yeh, 2008). The present findings replicate the results of previous studies (Hsu & Alden, 2008; Lu et al., 2014) reporting that Chinese-speaking international students prefer informal sources of help, particularly that of their parents and friends, over professional help. Qualitative responses focussed on reducing stress by getting involved, getting connected and studying harder.

Parents

Within Chinese society, Confucian philosophy is particularly evident in the relationship Chinese children have with their parents, where they are expected to fulfil parental expectations, respect parental figures, maintain self-harmony through their decisions and actions (Leung, 2010) and honour the family (Sue & Sue, 2002). The sharing of concerns or problems outside of the family unit would be considered a breach of family loyalty, shameful and highly stigmatising (Loya et al., 2010).

The majority of survey respondents in the current study (75%) were from one child families where the dependence on parental guidance is reported to be more pronounced and children have higher psychological attachment to their parents for guidance and direction (Forbes-Mewett & Sawyer, 2011). Given the cultural obligations and close bond Chinese children have with the parents, the high levels of reliance on their parents for support and advice in the current study was expected and consistent with international literature (Lu, 2013), with high numbers of participants ($n=118$) identifying their parents as a source they would turn to for support when stressed. Qualitative responses provided little additional evidence for the importance of parental support with only two participants noting they would make better use of familial support.

“Communicate with family members”

“Talk with my parents”

In contrast to the large numbers who would turn to their parents, a significant number of participants ($n=74$) reported they would not seek support from their parents and a small number of respondents ($n=28$) also ranked their parents in both categories, as a source they would, and would not turn to when stressed. Although the non-specific description of stress used in the survey may have influenced some participants responses, the complicated impact of Confucianism is a potential influencer resulting in conflicting preferences in parental support reported in this study. Young (2017) has identified that students may prefer not to speak truthfully about the challenges they face to show respect to their parents through filial piety and to avoid worrying them with their concerns, which may bring shame on themselves or their family. In addition, Chinese students in NZ have reported that they believed their parents had little understanding of the problems their child faced in NZ and were reluctant to discuss concerns with them (Ho et al., 2007).

The reliance many Chinese students have on their parents has been reported to negatively influence their engagement with university-based supports (Yan, 2017), who will turn to their family rather than student services. However, studies have shown that students would be more likely to engage with services if they were encouraged by family and friends (Li et al., 2017).

Given the strong connection Chinese students have to their parents, consideration needs to be given to the role parents play in the decisions their child makes. Recommendations have been given to Australian universities to support parents to better understand the supports available to students (Veness, 2016), in an effort to encourage students to engage with local support services. Providing information on services should be seen as a priority for institutions to encourage parental support to access services.

Friends

For international students, the development of social networks creates many positive benefits, with social support considered essential to their welfare (Mallinckrodt & Leong, 1992). The results of the current study concur with Bochner et al.'s (1977, cited in Bethel, 2015) work, with participants identifying their co-nationals as the primary friendship group they would turn to for support, followed by host nation peers and finally other international peers. Qualitative responses ($n=27$) identified that making friends was recommended to reduce stress on transition.

Home nation peers

The strong links international students make with their co-nationals has been well documented (Bethel et al., 2016) and this study confirms that Chinese students at Victoria are connected and supported by their NZ-based co-nationals, with over half of the participants selecting their Chinese friends as one of their top three options for support ($n=106$). Culturally, socially and linguistically, international students are drawn to others from their country of origin, gaining support and friendship with those that understand their culture and who they can communicate with in their native language (Young, 2015). Although participants in this study were not asked whether these co-national friendships had been formed since their arrival in NZ, it is anticipated this is likely to be the case for many, confirming the relative ease with which relationships are developed with people of the same cultures.

A small number of participants ($n=3$) directly encouraged connection with other Chinese students or through Chinese groups at the university to reduce stress on transition.

“Try to communicate with some people which came from the same country as me”

“I might try to approach members of VUW China student association earlier to gain information about everything I need to know re living here through

communicating with them, in order to help myself to adapt Wellington life quicker”

“Join some WeChat groups as soon as possible”

The strength of participants’ responses confirms the importance of co-national support, particularly in the early stages of a Chinese international student’s adjustment to university, when the development of a community is vital to support network development.

Host nation friendships

Social connections with local students have been identified as an important aspect to the psychological adjustment of Chinese students (Zhang & Goodson, 2011), yet the challenges of developing and maintaining friendships in their host nation is well documented (Mori, 2000; Yeh & Inose, 2003). In the current study, these challenges are not evidenced strongly, with a significant number of participants ranking their NZ friends as one of their preferred help-seeking options ($n=61$). An explanation for this higher than anticipated result may have been due to the number of students (62.4%) reporting having lived in the country for greater than a year, leading to successful acculturation to life in NZ.

Although a significant number of qualitative responses noted that making friends was recommended to reduce stress on transition, only a small number ($n=3$) noted specifically that establishing friendships with NZ’ers was important.

“Make more kiwi friends to know more culture of NZ”

“Be more open and make friends with locals”

Connections with peers from their host nation allows international students to improve their knowledge of NZ’s cultural rules and behaviours which in turn reduces the cultural distance between their home and host nations (Bethel, 2016).

International friends

Participants ($n=59$) also rated their international friends in NZ as one of their top three options for support when stressed. International friendships bring the added benefit of connecting with others experiencing the same challenges of transitioning to a new country, and for many, share the English language challenges faced by Chinese international students.

Participants felt that broadening their social networks to include connections with international students would have enhanced their experiences.

“Don’t limit oneself in the Chinese circle, make more international friends to practise speaking, can participate in beneficial society activities and volunteering activities more, in order to understand NZ local culture”

“Participate in some activities that are prepared for international students by the school more”

Friendships, whether with home nation, host nation or other international students, are clearly a strongly preferred and well-utilised network of support for Chinese students at Victoria and the many positive benefits which come from these connections should be encouraged by institutions. Offering a range of opportunities for social engagement, during orientation and ongoing throughout the year should be provided and well-promoted to ensure all Chinese students have the opportunity to attend.

Academic staff

Western academic systems encourage critical thinking and the challenging of opinions which is in stark contrast to the academic expectations in China, where Confucian beliefs are strongly evident. Students are expected to be respectful of authority (Lee, 1996, cited in Holmes, 2004) and avoid questioning their teacher (Young, 2017). With a significantly greater power distance between academic staff

and students in China than in NZ, the results of this study corroborated expectations, with academic staff rated the least preferred help-seeking option by 87 participants. Again, the non-specific use of the word stress in the survey may have influenced the results, where a definition of academic stress may have increased the likelihood of seeking out academic support. Additionally, although many participants in this study had been in NZ for greater than a year and would have experienced the smaller power distance of the NZ academic system, their cultural background and academic expectations may continue to be a significant barrier. To overcome this help-seeking barrier, institutions need to better support academics to develop their knowledge of mental health and culture, and in turn to better educate Chinese international students to understand the less formal relationship academics have with their students.

Student services

Poor uptake of student services as a help-seeking option was reported in the current study with only 22 students reporting they would use the services. However, a small number of participants ($n=12$) responded in the 'other' section that they would utilise Student Services, particularly Student Health. In addition, 19 students reported that they would not utilise student services, with a further 5 students noting in the 'other' section that they would not access student services. The minimal engagement with university support services reported by participants provides further evidence of the informal preferences to help-seeking expected from this cohort of students and highlights the difficulties NZ universities may face when implementing support service structures to cater for Chinese international students.

Web-based help seeking

Web-based supports and treatments have been promoted as an alternative to face-to-face psychological support for tertiary students, due to accessibility, cost effectiveness and potential for reducing stigma (Chan et al., 2016; Eisenberg et al., 2009). International studies have reporting mostly positive results of their potential usefulness and likelihood of uptake in the student population (Ryan et al., 2010).

However, despite the easy access to the internet tertiary students experience (Gordon et al., 2007), the findings of the current study do not support previous research, with only a small number of participants ($n=37$) indicating they would utilise the internet as one of their top three options for help-seeking, and a larger number ranking internet use as one of their least preferred options ($n=74$).

Two possible explanations for participants' lack of engagement with the internet for help-seeking are proposed. Firstly, the strict government regulations surrounding the use of the internet in China and concerns about monitoring by Government agencies have the potential to impact participants' internet use in NZ. Linking strongly to mental health stigma and saving face, participants may avoid web-based help-seeking to ensure concerns are kept private. Although NZ has less strict monitoring of the internet, Chinese students at Victoria may not yet have adapted to the more relaxed internet use in NZ, unlike their counterparts in Australian universities (Choi, 2015). A second explanation may be the unfamiliarity of participants with the web-based help-seeking options available, which may lead to the reported preference of Chinese students to engage with face to face treatments instead of web-based treatments (Lu et al., 2014).

Self-management of stress

Participants' qualitative responses noted they would not seek help and instead, persevere to manage their stress independently.

“One needs to be able to endure loneliness, think a way to find a distress method that suits oneself; otherwise there is a possibility of suffering from depression and anxiety. Don't let Chinese down.”

“All the pressure I have been suffered is the only way which must be passed, I don't think I should do something to avoid”

These responses strongly reflect the Chinese coping strategy to minimise or conceal concerns to maintain social harmony and not burden others with their issues (Moore & Constantine, 2005; Yeh, Arora & Wu, 2006, cited in Wei et al. 2012) and to persevere through difficulties (Yip, 2005).

Decreasing stress on transition

Participants provided a variety of suggestions to decrease the stress they experienced on arrival to NZ. Most notable of these suggestions, were getting involved (n=43) and study (17).

Getting involved in university and community activities was suggested by forty-three respondents as a method of decreasing their transition stress. They also noted a lack of knowledge about opportunities to get involved on arrival and needing to make an effort to meet new friends.

“I will try to get involved from the beginning. Go to student learning to participate workshops. Attend Vic plus programme. So many of these I did not really know when I came here”

“go out and social have more friends, meet new people. Friends can make you feel less lonely.”

Culturally, respondents felt that they would have done more planning and studied harder if they had their time again.

“Studying harder and harder”

“Doing some preparation for every classes.”

Transitioning to a new academic setting, speaking in their non-native language and coping with accents is a challenge faced by all non-native English speakers who move to NZ to study and the English language barrier is often cited as a major

stressor for international students (Mori, 2000). Participants ($n=10$) reported this as a barrier to their adjustment and commented on the importance of improving their English fluency.

“I would read more books or studied English better to gain more self-confidence because I think one of the causes to stress is lack of confidence”

“Learn to speak better English, can understand doesn't imply can speak, I think speaking is more important, it generates a lot of concerns when speaking English in front of native speaker friends”

For one student, the decision to take a certain class, requiring speaking in a group setting and the challenges of studying in a very different educational system was particularly worrying.

“I would not take a class that requires the attendance of discussion group every week. That made me really nervous and uncomfortable. I wasn't good at English. I hope the coordinator or someone else have warned me about that.”

Although the current study and previous Australian research (Lu et al., 2014) show no increase in psychological distress for Chinese international students on arrival to their host country, the transition had an obvious impact from the written responses received. This advice provides an opportunity to bestow incoming students with recommendations to help with planning and preparation for their life in NZ and could be used in pre-arrival and orientation information.

Student Counselling use and barriers

This section provides discussion on the quantitative and qualitative survey questions relating to the research questions: What barriers do Chinese students face accessing Student Counselling and how can the service be more accessible to them?

Consistent with international research, Chinese international students at Victoria under-utilise the university's counselling service with only a small number of participants in this study (12.3%) reporting having used the service. The low uptake of counselling supports statistics gathered from Student Counselling at Victoria, where only 4% of the university's Chinese student group had accessed the service in 2017 (M. Liang, personal communication, September 11, 2018).

Studies utilising Cramer's 'willingness to seek counselling' model found higher levels of psychological distress led to a greater readiness to seek counselling among university students (Leech, 2007) and Asian university students (Liao, Rounds and Klein, 2005). However, this was not the case in the current study where participants who reported high or very high psychological distress were no more likely to have utilised counselling than those with low or moderate distress levels.

The reluctance of Chinese students to seek help from mental health professionals is consistently reported and has been linked to a lack of counselling awareness, Chinese cultural beliefs, mental health stigma, English language concerns and limited understanding or recognition of mental health symptoms (Blignault et al., 2008; Ho et al., 2003) and will be discussed in the following section.

Lack of counselling awareness

A lack of awareness of counselling services has been identified as a common barrier amongst Chinese international students internationally (Lu et al, 2014; Yan, 2018), with research emphasising the urgent need to develop innovative approaches to improve knowledge of, and access to counselling support (Forbes-Mewett & Sawyer, 2011; Li et al., 2017; Lu et al., 2014). Over one quarter of participants in this study reported that they had not heard of Student Counselling at Victoria with 18% noting that they did not know how to contact the service. Qualitative data corroborates these findings with participants acknowledging they did not know of the service or were unsure how to make contact despite being at Victoria for many years.

“I have been here for 5-6 years, I don't know there is a student counselling”

“Student counsellor service can be more transparent because a lot of course mates have not idea about it and don't know how to approach, therefore there could be more open and variety ways of contacting methods, via internet or phone”

“maybe you need to make sure that more students know there is a student counselling. I have been through EPP, Foundation, undergraduate study for last 5 years, and currently, I am on the master stage. I think I might heard student counselling one or two times before, but I don't know where it is and when could I be here or other related questions.”

Although counselling services are more frequently available in schools and universities in China, the profession is in its infancy and uptake of the service by students is low (Thomason & Qiong, 2008). Improving student knowledge of counselling and other student support services is vital to improve access and awareness. Researchers have recommended strategies to improve Chinese students' attitudes and awareness of counselling as priorities to better serve this group of students. These recommendations include: better promotion of counselling services (Redfern, 2014; Yan and Berliner, 2009), the provision of multi-culturally sensitive counselling (Um-Perez, 2011), the use of peer counsellors and reinforcing the confidentiality of the service (Goh et al., 2007), better education about the effectiveness of counselling and improved accessibility to the service (Lu et al., 2014). Participants identified specific areas where the university could improve the promotion of counselling, particularly through better publicising at international orientation.

“It will be good if there is an introduction section of the student counselling on the day of orientation. Because we do not have this kind of student service back in China and we don't know how it works”

“maybe give us a brief introduction when we enrolled in, I mean, in the orientation so that we could know better”

“Maybe email the students or make some posters or flyers that let students notice what Student Counselling can help.”

All tertiary institutions in NZ are required to deliver an orientation programme which “provides the information and advice necessary for a student at the outset of his or her educational instruction” (NZ Qualifications Authority, 2016, 19 (5)). Victoria provides a comprehensive, mandatory two-day orientation programme that includes the provision of information on support services at the University, including a session run by the Student Health and Counselling teams. Information about Student Counselling, including the location and how to make contact, is provided in English - verbally, in writing and through web-links and is followed by ongoing reminders through e-newsletters, web and social media postings throughout the academic year. Additionally, many students choose to take a campus tour as part of their orientation programme which takes them to all student services, with an explanation of the service’s function and how to make contact.

Despite these many opportunities the university takes to promote student services, including Student Counselling, this study confirms that Chinese students are not receiving or retaining the information about supports available to them and more effective approaches are needed to ensure information is being received and understood. To support students to better retain orientation information, information should ideally be provided in their native language by a senior student or counselling staff during orientation, with the chance to ask questions, perhaps even utilising a bi-lingual speaker or translator. Throughout the year, counselling should be regularly promoted as a way to decrease stress and to improve academic grades.

Chinese culture

Mental illness is considered to be caused by a lack of self-discipline or character weakness or the result of a lack of harmony in relationships (Liu, 2018). As previously discussed, cultural beliefs strongly influence the help-seeking behaviours of Chinese students and this is particularly evident in relation to mental health support, where counselling may be incompatible with their cultural values (Vogel et al., 2007), leading to avoidance of professional psychological help.

Participants in the study reported a lack of need for Student Counselling with 82 students reporting they had had no need to use the service, despite the high levels of psychological distress recorded.

“I feel like it is not necessary”

“I don't know how it can make me feel better. My stress is from study and cultural conflicts”

“I reckon I can calm this type of emotion myself, approaching student counselling can't really solve the practical problems”

Although a genuine lack of need for mental health support was anticipated to be the case for a number of participants, cultural values and mental health stigma are likely to have been a barrier to some participants who considered counselling unnecessary. The traditional Chinese values of persevering, keeping emotions to oneself, avoiding bringing shame to the family and keeping the harmony were clearly factors influencing the decision to utilise counselling.

Participants also commented on the cultural differences between staff at Student Counselling their own culture and their preference to meet with a counsellor who understood Asian culture.

“I have only met with two psychologists, one is a westerner who doesn't understand my thoughts and feelings and that increased my illness, I don't

blame her because we have different life experiences and backgrounds, but at the same time it's not my fault to be ill."

"Local people but can speak fluent Chinese, understand both cultures and better had same situation before, and know how to through the difficulty of study and life."

Western counselling styles focus on individualistic values which are in direct contrast to the collectivistic values traditionally held by Chinese students, including the restraint of emotion (Sue & Sue, 1990, cited in Liu, 2009) and avoidance of disclosure of psychological issues. However, some participants noted an interest in trying counselling, identifying when it may be useful to them.

"Communicate with various student counsellors more might avoid leading onto the winding pathway"

"I will prob try to use student counselling service while I feel upset. I have never done that before, maybe it would help"

Clarity around counselling and a better understanding of the benefits it can bring to a student's life was a noted need, enabling students to make a more informed choice to engage or not. Whilst supporting students to better understand the western concept of counselling is vital to empower their informed decision making; however, it is also important to ensure counsellors are cross-culturally competent to provide a more effective service to Chinese students.

Researchers have encouraged the skill development of counsellors to better support students from Asian cultures. Western counselling encourages empowerment through assertiveness and independent decision making, requiring modifications need to be made to counselling theories to ensure they meet the needs of Chinese students (Lin, 2002). As an example, Cognitive Behavioural Therapy (CBT) has been evidenced as an effective intervention amongst the Chinese population, with higher efficacy found when the therapy has been culturally

adapted (Cui, 2016; Ng, 2018). CBT, the combination of behavioural and cognitive strategies, places the therapist in the role as expert, directing the therapy. The clear role definitions of therapist and client, and concrete therapeutic goals, plans, and procedures (Te Pou, 2010) utilised in CBT provide the structure and expertise that fits more appropriately with Chinese culture. To better support counselling staff to understand the needs of this client group, regular cultural-based training is a priority to ensure staff are upskilled and can offer the most culturally appropriate service.

English language barrier

English language proficiency or language confidence has been consistently reported as a major barrier to the provision of effective care through counselling (Forbes-Mewett & Sawyer, 2011b; Hurny, 2014; Le, 2018; Veness, 2016). In the current study, some participants ($n=35$) reported their lack of confidence in speaking English was a barrier to accessing Student Counselling. They also noted that speaking in their native language may be the preferred option for many students.

‘Sometimes if we say something using our own language, we could feel better.’

“If English communication is not ideal, shall provide students opportunities to communicate using mother tongues.”

For non-native English speakers, the articulation of emotions and personal problems to health professionals in NZ, and not understanding assessment, treatment and conditions are notable concerns (Ho et al., 2003). Chinese-speaking counsellors are a rarity, with only six Auckland-based counsellors located on a popular online counselling site (Talking Works, 2018), one based in Wellington and none employed by Student Counselling. At the time of writing, there was no plan to recruit additional multi-lingual counselling staff at Victoria; however, the wider

Student Health team has Chinese-speaking GP's and a nurse who are well utilised by Chinese students.

Access to Chinese-speaking counselling and medical staff has been a recommendation to Australian universities in an effort to better support their student population (Veness, 2016). Results from the current study evidence the potential benefit of Chinese students having access to a Chinese speaking counsellor at Victoria to remove this significant language and cultural barrier to the expression of emotion.

Mental health literacy

Mental health literacy is known to increase help-seeking (Cheng et al., 2018) and reduce mental health stigma (Eisenberg et al, 2009) and although not specifically assessed in the current study, is considered a potential contributor to the high levels of psychological distress and the perceived lack of need for counselling reported by participants.

Chinese students are under great pressure to succeed academically and many of the wellbeing strategies known to support stress reduction such as socialising, exercise and relaxation are not encouraged by parents (C. Li, personal communication, May 27th, 2018). Instead, the advice provided by their parents is to work harder, study longer and this message is mentioned by participants.

“pay all attention on learning”

“Studying harder and harder”

Mental health is not openly discussed in Chinese society, linking strongly with Chinese cultural values. Providing opportunities for Chinese international students to learn about mental health and wellbeing while they study in NZ should be considered by institutions.

Confidentiality

Concerns with confidentiality influence the decision of Chinese students to engage with counselling, with confidentiality strongly linked to stigma and the Chinese cultural values of saving face (Gulliver et al., 2010). Participants expressed their concerns about the privacy afforded at Student Counselling.

“let everybody know the student counselling; privacy guaranteed”

“Increase anonymity”

Reiteration of the confidentiality of the service should be provided at every opportunity, with a clear explanation of what this entails. The provision of information explaining confidentiality should be readily available in multiple languages to assist students and their families to better understand counselling services and the principles of privacy, as a strategy to improve access (Veness, 2016).

Counselling wait time

Waitlists are one of the strategies counselling services utilise to manage the high need for their services. However, waitlists at universities place additional barriers on students receiving timely mental health support, the outcome of which, leaves them less likely to attend their first appointment (Levy et al., 2005), perceive greater stigma for receiving psychological support (Blau et al., 2015) and may be at greater risk of becoming more unwell and requiring intensive treatment in the future (Forbes-Mewitt & Sawyer, 2011).

Waitlists are utilised at Victoria where the wait time for a standard 50-minute appointment ranges from 1-7 weeks (J. Harding, personal communication, September 20, 2018) depending on the time of the academic year. Participants in the current study expressed their dissatisfaction with wait times when they approached Student Counselling:

‘the wait time is ridiculously long, and ain’t nobody has time for that to be honest.’

“I’ve only used Student Counselling once. Although I was under a lot of stress and mental distress, I needed to wait for about two weeks for my appointment. When the day finally came, I felt I didn’t need it that much anymore”

Students of most universities in NZ face long waits to access mental health services through their institution and are vocal about the delay in receiving treatment (Smith, 2018). Universities NZ, the representative body for all eight NZ institutions, recently submitted feedback to the current NZ Government inquiry into mental health, noting that university students throughout NZ face unacceptable waiting times to see institution-based counselling services (Universities NZ, 2018b). Of additional concern in the international student market is the suggestion that longer waiting times for psychological support were correlated with students being less likely to recommend the university (Blau et al., 2015). From a recruitment perspective, this may have downstream financial implications.

At Victoria, Student Counselling have utilised a range of strategies and increased resourcing to reduce waiting lists for all students, with the maximum time now 3 weeks (M. Bensen, personal communication, June 17, 2019). The service triages students into emergency and duty appointments that are available each the day. International students also have the added benefit of being able to quickly access counselling outside the university through their mandatory medical insurance, which they are reminded of throughout the year.

Awareness and use of university services

This section addresses the questions: What university services and resources are students aware of and what university services and resources are currently utilised?

Research addressing the awareness and use of student services other than health and counselling amongst Chinese international students is extremely limited. The

paucity of work is only represented by Forbes-Mewitt & Sawyers's (2011) study of Chinese international students in the UK, which recommended that better promotion of all student services is needed to improve Chinese students' awareness and their access to university supports.

For the current study, it was anticipated that participants would show strong awareness and use of Victoria International, the international office at Victoria University. The office provides recruitment, admission, orientation and enrolment to international students when they begin their study and provides ongoing pastoral care and support with visa and insurance needs through the student lifecycle. The office also frequently sends information through newsletters and has a strong social media presence. The majority of participants (87.7%) reported they were aware of Victoria International, with three quarters (75%) reporting they had used the service.

Although over half of participants reported being aware of Student Health, Student Learning, Financial Support and Advice, Faculty/School Offices and the Careers Service, only Faculty/School offices and Student Health had been utilised by over 40% of participants. The comparatively low awareness is concerning as these services are frequently crucial to academic success providing health care, financial and learning advice, course guidance and study-related administration. The Disability Service was the least known of the services with only 26.1% aware of the service and 0.9% having used the service. This result is perhaps unsurprising, given the low numbers of international students with a significant disability who choose to study abroad due to the lack of insurance cover for pre-existing conditions, and secondly, due to the requirement of disclosure of a disability or impairment to access the service which may act as a barrier to international students.

Participants noted that they would have utilised services and other opportunities if they had known about them.

“I wish I knew there were services such as Student Counselling and Victoria International at Vic to provide support for me at that time, and I would definitely have gone there.”

“I will try to get involved from the beginning. Go to student learning to participate workshops. Attend Vic Plus programme. So many of these I did not really know when I came here”

Suggestions of services that participants felt are not currently provided at Victoria showed a clear lack of awareness of current service provision. Comprehensive support for course choices is provided by faculty staff.

“Guidance on students’ selection of courses aspect”

“guidance on selecting courses”

Academically, students may be unaware of the supports they can access and how they may be of benefit and this relatively poor awareness of student services will be of concern to institutions. Better promotion of services throughout a students’ academic journey is vital in order to ensure they have a clear understanding of the resources available to support their wellbeing and academic success. As with counselling, the provision of information in students’ native language at orientation would be a beneficial strategy to support awareness and understanding of how the university can help.

Advice to new students

The final survey question asked participants to give advice to new Chinese students who may be coming to study at Victoria University for the first time. Three themes were evident in their responses advising their peers to get connected, work on their English and seek support when needed.

The greatest number of responses ($n=33$) encouraged new students to get connected and advised them to connect with local students, not just Chinese students.

“Don't be shy to meet people. Don't just hang out with Chinese people and go out to see the world and experience.”

“try to make friends with locals, not only Chinese”

“Don't limit oneself in the Chinese circle, make more international friends to practise speaking, can participate in beneficial society activities and volunteering activities more, in order to understand NZ local culture”

The ease of which students connect with their home nation peers has been frequently noted and participants comments confirm these connections are made quickly.

The importance of being confident using English and asking questions were also noted by participants.

“Don't be embarrassed by the lack of English skills, when you're not afraid to speak more, you'll improve more.”

“Don't forget that English is very significant in your life”

Participants encouraged students to seek support and emphasised the positivity of help-seeking and where to get help from.

“Feel free to ask for help, there is always a place to seek for help.”

“Ask questions when you don't understand other people, let others help you”

“try to talk to lecturer and classmates”

The advice given by participants focusses on the issues noted throughout this study, specifically, connecting, English language competence and help-seeking.

Responses clearly indicate that many Chinese students are offering advice based on their own, possibly challenging experiences of acculturating to life in NZ.

Recommendations for Victoria and other tertiary education providers

The results of the current study show a large discrepancy between the high levels of psychological distress, low levels of mental health service utilisation and formal help-seeking of Chinese international students at Victoria. Although the research was based at one NZ university, they should be of interest to tertiary institutions who enrol Chinese international students in NZ. For these institutions, health providers and university policy makers, this study provides evidence to support the development of innovative, culturally appropriate strategies to better support this high-risk cohort of students.

Universities have a duty of care to better support the wellbeing of Chinese students studying in their institutions and normalise mental health and counselling amongst this population. The following recommendations, based on the results of this study, may help institutions to better support Chinese students who choose to live and study in NZ.

Improving access to counselling

With high psychological distress and low reported use of professional counselling, efforts are required to make the service more accessible to Chinese international students. Targeted recruitment of Chinese-speaking counsellors who students can talk to in their native language and who understand Chinese culture is an obvious unmet need for this cohort of students. With a limited pool of Chinese speaking counselling staff in NZ, higher level discussions with institutions that provide counselling training would be needed to target their marketing to Chinese students. Reiterating the presence of the service, confidentiality, and how the service can benefit students is necessary to improve student awareness and understanding of the assistance counselling can provide.

Pre-arrival

Pre-arrival, students could be provided with information about life in NZ, including the services available to them, as a strategy to increase their awareness of supports service structures. By linking these supports with specific examples of how they can be beneficial gives clear direction to incoming students ..., e.g., 'Student Learning can help you with your academic writing', 'the Conversation Group gives you the chance to practice your English with kiwi students'. Illuminating these opportunities gives students a direct link to issues that may be concerning them before they leave home. Presenting information in teaser form may increase student's awareness of what will happen during orientation and Victoria uses this strategy during pre-arrival campaigns e.g. 'during your orientation, you'll get to meet lots of other international students and be taken on a tour of campus'.

Recommendations from senior students who have already transitioned to Victoria would be a potentially useful source of advice for new students. This could be added to pre-arrival information and supported by photos or videos of senior students, reflecting on their arrival.

International orientation

The current study has clearly shown that the university's international orientation programmes are not meeting the needs of Chinese students at Victoria, who report being unaware of the many services significant to their wellbeing and academic success. This is despite having direct contact with many services during their orientation programme. However, with orientation being the one opportunity educational providers have a captured audience there are number of strategies that can facilitate better awareness and retention of information about services, with the following strategies recommended.

Firstly, ensuring orientation programmes provide students with the opportunity to learn and engage with services through 'meet and greet' sessions. Having the opportunity to listen and speak directly with staff about the services they offer provides students with the chance to gather information and ask questions. Ideally

the sessions are informal, with plenty of opportunities for students to engage. Providing information leaflets and other collateral, ideally in students' native languages, is a useful strategy that allows students to review these later and to discuss information with parents and friends.

Campus tours are an integral feature of most international orientation programmes and are designed to orientate students to campus and learn about services and supports available to them. Tour guides need to be well-trained to give clear descriptions of services and link to practical examples of when a student may find them useful. Tour guides should take students inside each service and approach the reception desk, clearly describing how to book an appointment. Ideally, tours should be provided by a guide who can speak in student's native language, to assist comprehension.

Although many international students come to NZ to develop their English language skills, their language level on arrival often limits their understanding. Providing a range of resources detailing the supports on campus in their native language should be a priority for institutions to develop, assisting the understanding of services and other supports available on campus and how to access them. Although resourcing may be an issue, given the large numbers of Chinese students studying in NZ, the benefits of providing this information are likely to outweigh any potential cost implications.

Providing opportunities for social connection is an imperative function of orientation programmes. Students turn to their friends for support in great numbers and orientation is the first opportunity many have to engage with their peers. Opportunities to spend time connecting with other students is highly recommended in this initial transition to university.

Post-orientation, information about services should be regularly reinforced through social media, emails, text messages and messaging through student associations. As one strategy to facilitate connections with Chinese international students, the international team at Victoria have strengthened their relationship with the

university's International Students Association (ISA) and the Chinese Students Association (CSA). Both groups are very active among their communities and are in regular contact with members. Through the CSA, Victoria's International have promoted various sessions run for Chinese students in Mandarin through their WeChat platform. Although turn out has been small to the sessions which have included well-being (n=25), essay writing (n=4) and exam preparation (n=15), it is hoped that messages with the correct information are passed on to non-attendees to better support their wellbeing and study. Participants reported being very grateful to have the sessions presented in Mandarin (C. Li, personal communication, April 20, 2019).

Using supports to promote formal help-seeking

Li's (2016) study indicated that Chinese students would be more likely to use services if they were encouraged by family and friends. Given the strong connection Chinese students showed to their parents in the current study and in international literature (Forbes-Mewett & Sawyer, 2011; Lu, 2013), consideration must be given to the role parents play in the decisions their child makes around their support needs. Ensuring parents are aware of the services and support available at institutions, may be helpful in encouraging them to promote them to their children, particularly if the potential benefit to academia is encouraged. Parents need to be provided with clear information about the services university offer to students and provided in the most appropriate medium and language. This is particularly relevant when seeking support for academic concerns which is considered acceptable in Chinese culture.

The strong relationships international students have with their peers and the benefits of these relationships are also very evident in the current study and well documented in literature (Bethel et al., 2016; (Zhang & Goodson, 2011). Offering international students ongoing opportunities to connect with their peers is valuable to provide peer support. Buddy programmes, as an example, should be provided as an opportunity to meet current students for provide support and guidance during the 'settling in' period when new international students arrive at NZ universities.

Despite the strong intention to improve English language amongst Chinese students, connecting Chinese international students with each other for support is an obvious but underutilised source at universities, given the strong relationships they have with each other. Providing peers with the correct information about services, how to access them and the benefits students may get is vital to support the transfer of information to students in need.

Given the small numbers of participants who reported the internet as a source they would turn to for help-seeking, focus on web-based resources to support mental health is likely to be poorly utilised by Chinese students. However, better education of NZ's approach to educating and supporting mental health would be useful and can be provided at orientation and ongoing throughout the year. Public campaigns including the freely available the Like Minds, Like Mine campaign (<https://www.likeminds.org.nz/>) and Depression.org (<http://depression.org/>) would be beneficial to promote.

Increasing connection with students

Unlike high schools who have the ability to connect with their students on a daily basis, universities do not regularly monitor the attendance of students. Whilst this is seen as supporting the independence of the mostly young adult population, it can be a double-edged sword, potentially allowing students to become isolated and psychologically unwell if they are unable or unwilling to reach out for help. A method to allow universities need to become more connected and accessible to Chinese students is through university tutors. Providing tutors with training to ensure they are able to respond to help-seeking and have an understanding of cultural differences may be beneficial to supporting connections and provide another avenue for Chinese students seeking help.

Improving English language proficiency

Concerns with English language proficiency is a consistent theme throughout this study, with Chinese international students noting the impact it has on all aspects of

their life in NZ. Again, universities are well-set up to offer this additional support and tutorials may be one opportunity to develop student's confidence in English language. As noted by one study participant who found tutorials very stressful, working directly with tutors to ensure they encourage and engage non-native English speakers needs to be a targeted priority to ensure confidence is not lost. Universities also need to offer more opportunities for students to engage with English language outside of the classroom to better support competence and confidence in communication. Victoria offers opportunities through a weekly conversation group and a news watch group; both are designed to encourage interaction and develop English language skills.

Increasing mental health literacy

Universities have a unique opportunity to improve the mental health literacy of students by providing education and support. As identified, improved mental health literacy may be an effective method to support the reduction in mental health stigma in Chinese students, to facilitate early intervention for mental illness and increase their help-seeking. A variety of literacy programmes are available internationally and it would be imperative that any programme provided for Chinese students has been developed with clear understanding of their cultural beliefs and facilitated in Mandarin to ensure comprehension.

Although academic staff scored poorly as a support for Chinese students, previous research into the mental health literacy of academics has shown that staff having better understanding of mental health issues makes them more likely to be approached by students. Providing opportunities to increase staff knowledge and confidence when working with Chinese international students may be an effective help-seeking opportunity, allowing staff to be more open to having conversations with students and feeling more confident to manage issues as they arise.

Limitations

This study has some limitations, and these may affect the interpretation of the results.

Although the sample size of 25% was considered adequate to extrapolate to the Chinese student population, it is still important to note that three-quarters of the Chinese population at Victoria did not respond and therefore the results of the study may not accurately reflect the opinions of all enrolled students. Although information about this survey was explicit about the care taken to manage confidentiality, concerns around the privacy of their information may have influenced the depth of responses to this survey by Chinese students.

Further, the design of the study may have influenced data collection and subsequent conclusions. The cross-sectional study design provided for a 'snapshot in time' and the results may not correlate to psychological distress of Chinese students at other times of the year. Additionally, the current findings are based on the self-reported data of a student sample recruited from one NZ university and may not be generalisable to other institutions in NZ or elsewhere.

It is considered likely that participants with personal experience of mental disorders may have been more likely to participate in the survey. This has the potential to inflate the prevalence and seriousness of psychological distress scores in this study. It is also important to note that while the study used the K10, a validated screening instrument, psychological distress does not confirm a clinical diagnosis of mental disorder.

The previously noted omission of question 6 of the K10 psychological distress scale (see Methodology, p. 42-43) also had the potential to confound results. However, the statistical analysis detailed to obtain adjusted mean and distress scores showed that this would not have impacted the study outcomes and therefore the interpretation of the findings.

Lastly, tertiary students are a well-researched cohort and survey fatigue may have reduced the potential sample size. However, this survey was timed to attempt to avoid the send out of other publicly known surveys and sent during periods of lower course-related workload during the university calendar to ensure the impact on recruitment and sample size was minimized.

Future research

Further studies are required to better understand the impact of cultural beliefs on mental health and help-seeking of Chinese international students in NZ, in an effort to ensure tertiary institutions are providing the most culturally appropriate supports for this large group of students. A nationwide study of the prevalence of psychological distress of Chinese international students would be important to confirm results from the current study. As this was the first study of its kind in NZ, further evidence of the mental health concerns evidenced here will more strongly enable action at a national level. In addition, although the current study did not identify any differences in distress dependent upon the time an individual had spent in NZ, prospective studies of the population would be beneficial to further confirm this result. Further research to establish reasons for high levels of psychological distress amongst the Chinese international student population should be a priority to more precisely identify the causes of their distress.

Studies investigating the mental health literacy of Chinese international students in NZ would also be useful to add further support to the provision of a programme of mental health education for this cohort of students. Finally, gathering a better understanding of the reasons for the lack of potential engagement with the internet as a help-seeking option for this population would be useful, given the range of options that are publicly and freely available in NZ.

Conclusions

Chinese tertiary students worldwide are reported to have higher levels of mental distress and lower levels of formal help-seeking than their international or domestic counterparts. Although the prevalence of psychological distress and help-seeking preferences among Chinese tertiary students is well documented internationally, there is a paucity of research examining these topics in Chinese students in NZ. This study sought to gain a NZ perspective on the psychological distress and help-seeking preferences of this large cohort of students.

This study had three main aims. Firstly, using the K10, baseline data on the levels of psychological distress of the Chinese international population at Victoria were

gathered. Results showed that the majority of study participants had elevated levels of distress, with 59% reporting high or very high psychological distress in the weeks prior to completing the survey. Distress levels did not differ significantly as a function of age, gender or the length of time the participant had lived in NZ and higher distress levels did not lead to greater utilisation of counselling support.

The second aim was to identify who or what Chinese international students turn to for help when stressed. Consistent with literature, findings clearly showed that Chinese students at Victoria prefer to turn to informal sources of support when stressed, particularly their parents and their friends, rather than formal supports. They were least likely to turn to academic or support staff for help. Participants identified strategies that they would recommend to reduce their stress levels, and noted making connections on arrival at Victoria, studying harder and improving their English language competency.

Chinese students at Victoria have limited use of the university's counselling service reporting cultural, linguistic and practical barriers to access. Despite the university providing many opportunities to develop an understanding of the supports available to them, this information is not being retained by this population and the service in its current form is not meeting their needs.

Recommendations from this study include providing better opportunities at orientation to familiarise students with services through the use of meet and greet sessions and information in their native language. Services, including counselling, need to be promoted throughout the year with a focus on concerns that are common to Chinese international students, including confidentiality, explanations of what counselling would be useful for and how to access the service.

Gaining a clearer understanding of the impact of culture on levels of psychological distress and help-seeking amongst the Chinese international student population is a needed area for future research. Further research into the needs of Chinese international students are needed to provide a more comprehensive picture of their mental state while studying in NZ and the reasons for their distress.

The results of this study support the growing body of evidence that Chinese students in tertiary study are a high-risk population for psychological distress, and that this cohort of students require institutional support to be carefully crafted and strategically implemented to take into account the subtle nuances of both Chinese culture and student behaviour.

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Appendices

Appendix A. Victoria Ethical Approval



Phone 04-463 5205
Email Averil.coxhead@vuw.ac.nz

MEMORANDUM

TO	Kelly Atherton
COPY TO	Dr Jon Cornwall
FROM	Dr Averil Coxhead, Acting Convener, Human Ethics Committee
DATE	2 June 2017
PAGES	1
SUBJECT	Ethics Approval: 24430 Psychological distress and help-seeking behaviours of Chinese international students at Victoria University of Wellington.

Thank you for your application for ethical approval, which has now been considered by the Standing Committee of the Human Ethics Committee.

Your application has been approved from the above date and this approval continues until 1 December 2018. If your data collection is not completed by this date you should apply to the Human Ethics Committee for an extension to this approval.

Best wishes with the research.

Averil Coxhead,
Acting Convener, Victoria University Human Ethics Committee

Appendix B. Emails to participants with translation

Initial email

Hello, you have been sent this survey as you are a Chinese international student at Victoria University of Wellington. I am currently completing my Masters in the Graduate School of Nursing, Midwifery and Health programme looking at the psychological distress and help seeking behaviours of Chinese international students.

哈喽，您会收到这封调查问卷是因为你是维大的其中一个华裔国际学生。我正在维大护理，助产及健康研究学院攻读硕士学位。我的研究项目是探讨心理压力及苦楚，尤其是华裔国际学生在这方面的寻求帮助方式。

I am contacting Chinese international students to ask you to complete a short survey on your experiences here at Victoria. The survey is anonymous and will take 10-15 minutes to complete.

我诚挚的希望可以在调查卷里分享你在维大的经历。这封调查问卷是匿名问卷，您的所有个人信息会被严格保密。您只需花上10至15分钟来完成它。

As a thank you, you will be asked to enter your email address at the end of the survey to go in the draw to win one of 5 \$20 Vic Books vouchers. Your contact details will be kept separate from your responses to protect your anonymity.

为了表示我们对您的感谢，请在提问卷的末端留下您的电子邮件地址以便参与五份二十元的大学Vicbook 代金券。你的电邮地址将不会与此试券的作答一同被纳入，以确保此研究的所有数据处于匿名状态。

This survey will close on

这调查卷将截至于X月X 日。

For more information and how to start the survey, please read the attached Participant Information Sheet and click on the link at the end.

想了解此研究项目以及这份调查问卷的更多详情，请参阅此函附上的参与者须知事项并点击其末端的网址以开始作答。

Reminder email 1 & 2

Hello, you were recently sent this survey as you are a Chinese international student at Victoria University of Wellington. I am currently completing my Masters in the Graduate School of Nursing, Midwifery and Health programme looking at the psychological distress and help seeking behaviours of Chinese international students.

哈喽，您会收到这封调查问卷是因为你是维大的其中一个华裔国际学生。我正在维大护理，助产及健康研究学院攻读硕士学位。我的研究项目是探讨心理压力及苦楚，尤其是华裔国际学生在这方面的寻求帮助方式。

I am contacting Chinese international students to ask you to complete a short survey on your experiences here at Victoria. The survey is anonymous and will take 10-15 minutes to complete.

我诚挚的希望可以在调查卷里分享你在维大的经历。这封调查问卷是匿名问卷，您的所有个人信息会被严格保密。您只需花上10至15分钟来完成它。

As a thank you, you will be asked to enter your email address at the end of the survey to go in the draw to win one of 5 \$20 Vic Books vouchers. Your contact details will be kept separate from your responses to protect your anonymity.

为了表示我们对您的感谢，请在提问卷的末端留下您的电子邮件地址以便参与五份二十元的大学Vicbook 代金券。你的电邮地址将不会与此试券的作答一同被纳取，以确保此研究的所有数据处于匿名状态。

This survey will close on

这调查卷将截至于X月X 日。

For more information and how to start the survey, please read the attached Participant Information Sheet and click on the link at the end.

想了解此研究项目以及这份调查问卷的更多详情，请参阅此函附上的参与者须知事项并点击其末端的网址以开始作答。

Final email reminder

Hello, this is your last opportunity to tell us about your experiences as a Chinese international student at Victoria University of Wellington.

哈咯，这将是您最后一个机会以身为维大的其中一个华裔国际学生在这调查卷里与我们分享您有关的经历。

I am currently completing my Masters in the Graduate School of Nursing, Midwifery and Health programme looking at the psychological distress and help seeking behaviours of Chinese international students.

我正在维大护理，助产及健康研究学院攻读硕士学位。我的研究项目是探讨心理压力及苦楚，尤其是华裔国际学生在这方面的寻求帮助方式。

I am contacting Chinese international students to ask you to complete a short survey on your experiences here at Victoria. The survey is anonymous and will take 10-15 minutes to complete.

我诚挚的希望可以帮助您在调查卷里分享您在维大的经历。这封调查问卷是匿名问卷，您的所有个人信息会被严格保密。您只需花上10至15分钟来完成它。

As a thank you, you will be asked to enter your email address at the end of the survey to go in the draw to win one of 5 \$20 Vic Books vouchers. Your contact details will be kept separate from your responses to protect your anonymity.

为了表示我们对您的感谢，请在提问卷的末端留下您的电子邮件地址以便参与五份二十元的大学Vicbook 代金券。您的电邮地址将不会与此试券的作答一同被纳取，以确保此研究的所有数据处于匿名状态。

This survey will close on

这调查卷将截至于X月X 日。

For more information and how to start the survey, please read the attached Participant Information Sheet and click on the link at the end.

想了解这研究项目以及这调查卷的更多详情，请参阅此函附上的参与者须知事项并启动其末端的网址以开始作答。

Appendix C. Participant Information Sheet



Psychological distress and help seeking behaviours of Chinese international students at Victoria University of Wellington.

心理压力及苦楚：探讨维大华裔国际学生这方面的寻求帮助方式

INFORMATION SHEET FOR PARTICIPANTS

参与者须知事项

Thank you for your interest in this project. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to take part, thank you for considering my request.

谢谢你有兴趣参与这项研究。请细读所有须知事项后方可决定参与与否。如果你决定参与，我们致上感谢。如果你决定不参与，我们谢谢你曾对此项研究项目做出考量。

Who am I? 我是谁？

My name is Kelly Atherton and I am a master's student in the *Graduate School of Nursing, Midwifery and Health* programme at Victoria University of Wellington. This research project is work towards my thesis.

我的名字叫Kelly Atherton。我是维大护理，助产及健康研究学校的硕士生。这项研究是我硕士论文的项目。

What is the aim of the project? 这项项目的目的是什么？

This project has been designed to explore the mental health and help seeking preferences of Chinese students during their study at Victoria.

这项目主要是探讨精神上的健康以及维大华裔学生寻求这方面帮助的优先选择。

We hope to gather information on the challenges Chinese students face and who or what they turn to for help.

我们希望搜集华裔学生所面临的挑战以及他们如何寻求这方面的帮助。

As part of this survey, we will be asking about students' use of the following university support services: 在这份调查问卷里，我们会问学生们有关以下各种大学所提供的服务：

- Careers and Advice 职业咨询处
- Disability Support 残障支持处
- Faculty or School office 科系或学院管理处
- Financial Support and Advice 财务支持及咨询处
- Student Counselling 学生辅导处
- Student Health 学生健康保健处
- Student Learning 学术咨询处
- Victoria International 维大国际部

This research has been approved by the Victoria University of Wellington Human Ethics Committee (approval number 24430).

这研究项目已获取维大人文道德准则委员会的批准（批准编号是 2 4 4 3 0 ）。

How can you help? 你能帮忙什么？

If you agree to take part in this survey, you can choose to respond in English or in Mandarin, whichever you prefer.

如果你同意参与此提问卷，你可选择用英语或中文作答。

You will have the opportunity to share your experiences, inform scholarly work and provide researchers and practitioners with a better understanding of Chinese students and their experiences studying and living in Wellington.

在作答中，你有机会分享你的经历，以贡献于学术界并让研究者们和从业者们更加了解华裔学生在威灵顿生活和读书的经历。

What will happen to the information you give? 你提供的资讯会是如何被处理？

This research is anonymous. This means that nobody, including any of the researchers, will be aware of your identity. We recommend you do not include any details that may identify you or anyone else in your comments.

这研究是处于匿名状态。这表示没有人，包括任何一个研究者，可以知道你的身份。我们提议你在留下任何的评语里不含有任何或可揭发你的身份或任何人身份的资料。

Only my supervisors and I will read the survey responses. The surveys will be kept securely and destroyed 5 years after the research ends.

只有我和我的导师们能读取提问卷的作答。所有作答将被安全的保管并在研究完成后的五年被摧毁。

What will the project produce? 这项目会提供什么？

The information from my research will be used in my Masters' thesis, conference presentations and journal publications related to student support.

这项目的信息将会被反映在我的硕士论文里，研讨会发表以及有关学生辅助的学术文章发表上。

You will be able to access the thesis when completed and any subsequent publications that arise from this study.

你将可浏览我之后完成的论文以及任何有关这研究项目所提呈的发表文献。

If you accept this invitation, what are your rights as a research participant? 如果你同意参与，身为一个参与者你有什么权力？

You do not have to accept this invitation if you don't want to and this will have no bearing on your access to services at Victoria, or your academic record.

如果你不想接受这份邀请来参与此项研究，你大可不必参与；这将不会对你在维大使用任何服务或在你的学术成绩上有任何影响。

If you do decide to participate, you have the right to:

如果你决定参与，你有权

- choose not to complete the survey
选择不完成提问卷
- ask any questions about the study at any time by contacting myself or my supervisor
在任何时候向我或我的导师提出有关此研究的任何问题
- read any reports of this research when completed by emailing me to request a copy.
电邮我以获取一份我之后完成的研究报告，以供参阅

As this survey is anonymous, you will not have the opportunity to withdraw your responses after they have been submitted.

因为这份提问卷处于匿名状态，一旦你提交了你的作答，你将无法撤回你所提交的已完成的问卷。

The survey aims to be written in a supportive manner, however it is possible that thinking about any difficulties you may have experienced could make you feel uncomfortable. 这份提问卷是在有利于辅助前提下促成的，但是它亦有可能让你在回想你曾经经历过的一些困难处境而让你感到不舒服。

If this is the case, you can stop at any time. You can also talk to myself or my supervisor, a trusted person at university or at home, or a counsellor at Student Counselling by referring yourself through the following link:

<http://www.victoria.ac.nz/students/support/wellness/counselling-self-referral>

如果有类似情况发生，你可随时停止作答。你也可以向我或我的导师，任何在大学或在家可信任的人，抑或到以上网址联系学生辅导处的其中一个辅导师倾诉，寻求帮助。

If you have any questions or problems, who can you contact? 如果你有任何问题，你可以联系谁？

If you have any questions about the research, either now or in the future, please feel free to contact either:

如果你对此研究项目有任何问题，无论是现在或之后，请尽管联系以下任何一位：

Student: 学生

Name: Kelly Atherton

姓名

Kelly.atherton@vuw.ac.nz

Supervisor: 导师

Name: Dr Jon Cornwall

姓名

Role: Programme Director, Bachelor of Health

职责：健康大专科系主任

School: Graduate School of Nursing, Midwifery and Health

学校：护理，助产及健康研究学校

Phone: +64-4-463 6650

电话

John.cornwall@vuw.ac.nz

Human Ethics Committee information 人文道德准则委员会资讯

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convener: Associate Professor Susan Corbett by email: susan.corbett@vuw.ac.nz or telephone +64-4-463 5480.

如果你有任何有关人文道德准则的问题，你可联系维大此委员会负责人：Susan Corbett副教授。其电邮和电话联系分别是susan.corbett@vuw.ac.nz及+64-4-463 5480。

Prize Draw 幸运抽奖

As recognition of the time and effort you put into completing this survey, all students who complete the survey before the closing date ofwill be entered in a prize draw to win one of five \$20 Vic books vouchers.

为了回馈你的时间与精力来完成此提问卷，所有在X月X日完成此卷的将可以参与五份价值纽币二十元的Vicbook 代金券抽奖。

If you would like to be put in the draw to win one of five \$20 Vic books vouchers, please leave your email address below. Please note that if you choose to enter this draw, your email address will not be collated with the main survey to maintain your anonymity.

如果你想要参与五份价值纽币二十元的大学书券抽奖，请在以下填入你的电邮地址。

在此声明，如果你选择了参与，你的电邮地址**将不会与此试券的作答一同被纳取**，以确保此研究的所有数据处于匿名状态。

How to begin 如何开始

This survey will take you approximately 5 - 10 minutes to complete. To begin the survey, please click the arrow at the bottom of the screen.

你将会花大约五至十分钟来完成这提问卷。请按此屏幕底下的箭头以开始作答。

Appendix D. Qualtrics survey with translation

Q1 What is your gender? 您的性别?

- ☐ Male 男性 (1)
- ☐ Female 女性 (2)
- ☐ Gender diverse 其他 (3)

Q2 How old are you? 您的年龄?

- ☐ 17 or under (1)
- ☐ 18 十八 (2)
- ☐ 19 十九 (3)
- ☐ 20 廿 (4)
- ☐ 21 廿一 (5)
- ☐ 22 廿二 (6)
- ☐ 23 廿三 (7)
- ☐ 24 廿四 (8)
- ☐ 25 廿五 (9)
- ☐ 26 years or over 廿六以上 (10)

Q3 What is your current level of study? 你现在就读什么课程?

- ☐ English Proficiency Programme (EPP) 英语培训 (1)
- ☐ Undergraduate full degree 本科课程 (2)
- ☐ Postgraduate full degree 研究生课程 (3)
- ☐ Twinning/international programme 2+2 或 3+1 国际项目课程 (4)
- ☐ Study Abroad/Exchange 海外交流课程 (5)
- ☐ PhD 博士生课程 (6)
- ☐ Other, please state 其他, 请列下 (7) _____

Q4 What is your marital status? 你目前的婚姻状况是。。。?

- ☐ Single 单身 (1)
- ☐ In a relationship 有伴侣关系中 (2)
- ☐ Married 已婚 (3)
- ☐ Separated / divorced 已分居/离婚 (4)
- ☐ De facto 未婚同居中(事实婚姻) (5)
- ☐ Other, please state 其他, 请列下 (6) _____

Q5 Do you have siblings? 你有兄弟姐妹吗?

- ☐ Yes 有 (1)
- ☐ No 没有 (2)

Q6 Where are you from? 你来自哪里?

- ☐ Mainland China 中国 (1)
- ☐ Taiwan 台湾 (2)
- ☐ Hong Kong 香港 (3)
- ☐ Macau 澳门 (4)
- ☐ Other, please state 其他, 请列下 (6) _____

Q7 How long have you lived in NZ, in total? 你在新西兰居住多久了?

- ☐ Less than 3 months 少过三个月 (1)
- ☐ 3-6 months 三至六个月 (2)
- ☐ 6 months - 1 year 六至十二个月 (3)
- ☐ Greater than 1 year 超过一年 (4)

Q8 What type of accommodation do you currently live in? 你目前的住所是。。。?

- ☐ University hall accommodation 大学宿舍 (1)
- ☐ University homestay 大学寄宿家庭 (2)
- ☐ Private flat 私人出租房 (3)
- ☐ Private board 私人寄宿 (4)
- ☐ Other, please state 其他, 请列下 (5) _____

Q9 The following questions ask about how you have been feeling during the past 4 weeks. For each question, please rate how often you had this feeling from 1 - None of the time to 5 - All of the time.

以下问题是想了解你过去四个星期的情感经历。请选择最适合你的情况。1 是完全没有。。。5 是每时每刻。

	None of the time 完全没有 (1)	A little of the time 偶尔，但很少 (2)	Some of the time 偶尔，有时 候 (3)	Most of the time 经常 (4)	All of the time 每时每刻 (5)
About how often did you feel tired out for no good reason? 你通常多久会没有 原因的感觉到疲 倦？ (1)	☐	☐	☐	☐	☐
About how often did you feel nervous? 你通常 多久会感觉到紧张 ？ (2)	☐	☐	☐	☐	☐
About how often did you feel so nervous that nothing could calm you down? 你通常多久会感觉 到极度紧张以至不 能恢复平静？ (3)	☐	☐	☐	☐	☐
About how often did you feel hopeless? 你多久会感觉到对 绝望？ (4)	☐	☐	☐	☐	☐
About how often did you feel restless or fidgety? 你多久会感觉到烦 躁或手忙脚乱？ (5)	☐	☐	☐	☐	☐

Q10 The following questions ask about how you have been feeling during the past 4 weeks. For each question, please rate how often you had this feeling from 1 - None of the time to 5 - All of the time.

以下问题是想了解你过去四个星期的感觉。请在每个问题里，估计你有多常有此感觉。一是完全没有。。。五是每时每刻。

	None of the time 完全没有 (1)	A little of the time 一些时候 (2)	Some of the time 有时候 (3)	Most of the time 大多数时候 (4)	All of the time 每时每刻 (5)
About how often did you feel so restless that you could not sit still? 你多久会感觉到烦躁以至坐立不安? (1)	☐	☐	☐	☐	☐
About how often did you feel depressed? 你通常多久会感觉到沮丧? (2)	☐	☐	☐	☐	☐
About how often did you feel that everything was an effort? 你有多常感觉到做每一件事情都十分费力? (3)	☐	☐	☐	☐	☐
About how often did you feel so sad that nothing could cheer you up? 你有多常感觉到难过以至没有任何东西能让你重新振作起来? (4)	☐	☐	☐	☐	☐
About how often did you feel worthless? 你有多常感觉到自己没有价值? (5)	☐	☐	☐	☐	☐

Q11 When you are stressed or feel under pressure, who or what do you turn to for help? Please number your your most preferred options from number 1 - 3.

当你感到紧张焦虑或承受压力时，你会向什么人咨询或采取什么方式缓解你的焦虑和压力？ 请在你前三个优选的项目前依序标上一，二和三。

- _____ My international friends that live in NZ 我住在纽西兰的国际朋友们 (1)
- _____ My friends that live overseas 我在国内的朋友们 (2)
- _____ My Chinese friends that live in NZ 我在新西兰的中国朋友们 (3)
- _____ My NZ friends 我在新西兰的朋友（特指新西兰人）(4)
- _____ My parents 我的父母 (5)
- _____ Other family members 我的任何家人们 (6)
- _____ Academic staff - tutor/lecturer/course coordinator/supervisor 学术界职员们 – 导师/讲师/科系主任/导师 (7)
- _____ The internet 网络 (8)
- _____ Student Services (please name the service) 大学所提供的学生服务（请举例）(9)
- _____ Student Services (please name the service) 大学所提供的学生服务（请举例）(10)
- _____ Other (please state) 其他（请举例）(11)

Q12 When you are stressed or feel under pressure, who or what do you not turn to for help? Please number your least preferred options from number 1 - 3. 当你承受压力或

感到压力时，你不会咨询何人或何处？请在你前三个优选的项目前依序标上一，二和三。

- _____ My international friends that live in NZ 我住在纽西兰的国际朋友们 (1)
- _____ My friends that live overseas 我在国内的朋友们 (2)
- _____ My Chinese friends that live in NZ 我在新西兰的中国朋友们 (3)
- _____ My NZ friends 我在新西兰的朋友（特指新西兰人）(4)
- _____ My parents 我的父母 (5)
- _____ Other family members 我的任何家人们 (6)
- _____ Academic staff - tutor/lecturer/course coordinator/supervisor 学术界职员们 – 导师/讲师/科系主任/导师 (7)
- _____ The internet 网络 (8)
- _____ Student Services (please name the service) 大学所提供的学生服务（请举例）(9)
- _____ Student Services (please name the service) 大学所提供的学生服务（请举例）(10)
- _____ Other (please state) 其他（请举例）(11)

Q13 Student Counselling is available to all students and is a free, confidential service offering support and advice on academic and personal issues. We are interested to know if there are barriers that have stopped you from using Student Counselling since you have been at Victoria University. You can tick as many statements as are relevant.

学生辅导是个给所有学生们的一个免费并且隐秘的服务。我们有兴趣知道是否有什么原因让你自从在维大以来不用此服务。你可以在所有有关的说法前打钩。

- ☐ I have used Student Counselling (1) 我有用过学生辅导服务。
- ☐ I would not because I'm not confident in my ability to speak English 我不用因为我对自己的英语会话能力没有信心。(2)
- ☐ I have not heard of Student Counselling 我没有听说过学生辅导服务。(3)
- ☐ Culturally, I would not be comfortable speaking with a counsellor 基于我的文化，我并不很舒服和辅导员谈话。(4)
- ☐ I do not know how to contact Student Counselling 我不知道如何联系学生辅导处。(5)
- ☐ I have had no need to use Student Counselling 我还不曾用过学生辅导服务。(6)
- ☐ I would need to be very unwell to use Student Counselling 只有在十分不适的情况下才会让我用学生辅导服务。(7)
- ☐ Other (please state) 其他，请列下 (8) _____

Q14 We are interested to know what would make Student Counselling at Victoria University more accessible to you. Please write down what would make you more likely to use this service.

我们有兴趣知道有什么方法可以让维大的学生辅导服务更加迎合你的需求。请写下你认为的所有可能性。

Q15 The following question relates to other student services at Victoria University. Please mark the services you are aware of since you have been at Victoria University.

以下是维大其他的学生服务。请在你知道的服务旁打钩。

- ☐ Careers and Advice 职业咨询处 (7)
- ☐ Disability Support 残障支持处 (1)
- ☐ Faculty or School office 科系或学院管理处 (2)
- ☐ Financial Support and Advice 财务支持及咨询处 (3)
- ☐ Student Health 学生保健处 (4)
- ☐ Student Learning 学术咨询处 (5)
- ☐ Victoria International 维大国际部 (6)

Q16 The following question relates to other student services at Victoria university. Please mark the services you have used since you have been at Victoria University.

以下是维大其他的学生服务。请在你曾用过的服务旁打钩。

- ☐ Careers and Advice 职业咨询处 (7)
- ☐ Disability Support 残障支持处 (1)
- ☐ Faculty or School office 科系或学院管理处 (2)
- ☐ Financial Support and Advice 财务支持及咨询处 (3)
- ☐ Student Health 学生保健处 (4)
- ☐ Student Learning 学术咨询处 (5)
- ☐ Victoria International 维大国际部 (6)

Q17 What service that Victoria does not have, could be useful to you?

维大是否有少了哪些服务是你认为对学生有帮助的？

Q18 Thinking about your arrival in Wellington and your first period of study at Victoria University, what would you do differently if you had the time again, in order to decrease any stress you may have experienced during that transition?

回想你第一次到达威灵顿在维大就读的第一学期时，假使时间能重来，你会做出什么不一样的事以减轻当时你可能经历的压力？

Q19 What advice would you give to new Chinese students who may be coming to study at Victoria University for the first time?

对于首度来到维大就读的华裔生，你会有什么忠告给予他们？

Q20 If you would like to be put in the draw to win one of five \$20 Vic books vouchers, please leave your email address below. Please note that if you choose to enter this draw, your email address will not be collated with the main survey to maintain your anonymity.

如果你想要参与五份价值纽币廿元的大学书券抽奖，请在以下填入你的电邮地址。在此声明，如果你选择了参与，你的电邮地址将不会与此试券的作答一同被纳取，以确保此研究的所有数据处于匿名状态。

Q21 For some people, thinking about stress and worries can make you feel distressed. If you have any concerns about your emotional health, there are services at Victoria University and in the community that you can contact to get

assistance. During office hours, you can contact Student Counselling or Student Health to see a doctor or a counsellor on 04 463 5310. At any time of day, you can contact Healthline on 0800 611 116. You will speak with a nurse who will give you advice on how best to manage your situation. If you are concerned about your safety or the safety of someone else, please call 111.

对一些人来说，想到压力和烦恼可以让人觉得苦恼。如果你对自己的情绪健康有所忧虑，你可以在维大和社团里的有关服务处得到帮助。办公时间，你可联系学生辅导处或到学生保健处去看医生或致电**044635310**联系辅导人员。任何时候，你也可致电健康专线**0800 611 116**以寻求帮助。在线上，你将会和一个护士通话，他会给你一些忠告让你以最好的方式操持你的状况。如果你对你的安全或其他人的安全有所忧虑，请拨打**111**。