Validation of a Vietnamese Mental Health Recovery Scale (VRS) in a community sample of Vietnamese refugees living in the UK:
A mixed methods study

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Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Matthew Lim Sheng Mian 林圣勉

Date: 17 June 2016
‘The perfect man has no self;
The spiritual man has no achievement;
The true sage has no name’

- Chuang Zi 庄子
Overview

Two studies and a critical reflection are presented in this thesis. In Chapter 1, a systematic review of the links between a Psychological Sense of Community (PSC) and subjective wellbeing, social relationships and community structures are investigated. Data from 20 East and Southeast (E/SE) Asian studies were explored using meta-analytic methods. This revealed medium to large effects in all categories investigated. Of particular significance was how relationship quality associated with a stronger PSC than social support, and strong community management was associated with a stronger PSC than residential features.

In Chapter 2, a psychometric validation study of a Vietnamese Mental Health Recovery Scale (VRS) is presented. Thirteen Vietnamese refugees recruited from a Vietnamese mental health charity were interviewed in two focus groups. In consultation with an expert professional panel (n = 7), and guidance from existing recovery scales, these qualitative themes informed the content and wording of the VRS items. Forty-eight further service users from the same charity completed the VRS. This procedure validated a 15-item VRS that measured recovery processes such as meaningful social roles and interactions, self-management of problems, and spiritual attitudes and living. Total scores on the scale predicted self-rated wellbeing, fewer mental health symptoms, and lower professional ratings of general life functioning.

In Chapter 3, the present research is critically discussed from a community and cultural psychology perspective. In particular, the social circumstances of E/SE Asia, and the social philosophies of the region such as Confucianism, Daoism and Buddhism, are reviewed.
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For Pa, Ma, Kor, Di

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Part 1.  The literature review

Does a Psychological Sense of Community (PSC) relate to subjective wellbeing, social relationships and community structures? A meta-analysis of East and Southeast Asian studies
1.1 Abstract

Aims: In East and Southeast (E/SE) Asia, research interest in the association of a Psychological Sense of Community (PSC) with subjective wellbeing, social relationships and community structures has been growing. However, no meta-analytic review of this data has been done. This has limited our understanding of how these psychological processes operate across contexts and compare with those in Western regions. Method: To fill this gap, data was extracted from 20 quantitative studies (21 samples) that administered a version of the Sense of Community Index (SCI). Two independent researchers rated the quality of each study. Results: A significant link between PSC and subjective wellbeing was found, \( r = .25, 95\% \text{ CI} [.20, .30], z = 9.64, p < .001 \). Critically, moderating analyses of differences across studies revealed that PSC is better predicted by indicators of relationship quality than social support, \( \chi^2(1) = 15.37, p < .001 \); PSC also had stronger associations with perceived good community management than residential features, \( \chi^2(1) = 18.41, p < .001 \). Study quality assessments achieved strong inter-rater agreement (ICC = .90), and these ratings cannot explain the results above. Conclusion: The findings are discussed in context of traditional E/SE Asian cultural values, and contemporary social trends of mass migration in the region.
1.2 Introduction

In 1974, Seymour Sarason wrote a seminal book arguing that social psychological processes are key factors that determine personal and collective wellbeing. As national health systems in Europe and North America transitioned towards greater community-based care, a Psychological Sense of Community (PSC) was proposed as the core construct for consideration (Sarason, 1974). This call has since been answered with great interest by both researchers and practitioners in the field of Community Psychology. The Journal of Community Psychology alone has published four special issues on the topic (two in 1986, and one each in 1996 and 1999; reviewed by Chavis & Pretty, 1999).

Over the last three decades, PSC research has been marked by challenges of definition. What constitutes a community is an ongoing conversation (see Bess, Fisher, Sonn, & Bishop, 2002 for a discussion), and the most prominent theoretical framework for PSC was proposed by McMillan and Chavis (1986; and further developed by McMillan, 1996). This systematised account led to the development of multiple questionnaires that assessed PSC. Long and short versions of these Sense of Community Indexes (SCI) are now available (Chavis, Hogge, McMillan, & Wandersman, 1986; Chavis, Lee, & Acosta, 2008; Koh & Kim, 2003; N. A. Peterson, Speer, & McMillan, 2008), of which, the most widely used brief version was developed by Perkins, Florin, Rich, Wandersman, and Chavis (1990).

McMillan and Chavis’s (1986; and later McMillan, 1996) framework proposed that PSC is a multifactorial experience of community life that incudes feelings of: (a) membership; (b) influence; (c) integration and fulfilment of needs; and (d) shared emotional connection.
Membership is the subjective feelings of inclusion either due to shared community standards, or common symbolic systems such as language and cultural practices. This form of social inclusion comprises a sense of security and belonging that is further established by mutual trust and having vested interests in the community (McMillan, 1996; McMillan & Chavis, 1986). The SCI by Perkins et al. (1990) operationalised this as feelings of being “at home” (item 5) or “known” by neighbours (item 6), and by one’s ability to “recognise” people in the community (item 4).

Influence is the perceived ability to personally and collectively effect change within the community. Equally, it is a recognition that the community has conforming powers on its members through social mores that promote cohesion (McMillan, 1996; McMillan & Chavis, 1986). The SCI describes it as having personal “influence” over what the community is like (item 8), having community members that can get problems “solved” (item 9), and “caring” about what others think of one’s actions (item 7; Perkins et al., 1990).

Integration and fulfilment of needs is the experience of reward where personal needs are valued and met. This climate of mutuality maintains a strong satisfaction within the community (McMillan, 1996; McMillan & Chavis, 1986). SCI items include the experience of benefits for being part of this community (item 1), sharing the “same values” (item 2) and wanting “the same thing” (item 3; Perkins et al., 1990).

Lastly, shared emotional connection is the strong social bonds of a shared history, e.g., overcoming adversity as a community (McMillan, 1996; McMillan & Chavis, 1986). The SCI describes this as a strong personal desire to “belong to this
community” (item 10), and “for a long time” (item 12) because members “get along” (item 11; Perkins et al., 1990).

The four-factor structure of the PSC construct has not always been replicated by the SCI (Flaherty, Zwick, & Bouchey, 2014; D. A. Long & Perkins, 2003; N. A. Peterson, Speer, & Hughey, 2006). Nevertheless, many have argued for the continued development of the scale because of the strong, and widely accepted, theoretical system it presupposes. The repeated validations of the total score of the SCI in diverse settings such as geographical (neighbourhood) and network (internet, educational, immigrant and religious) communities also add to its credibility (Chipuer & Pretty, 1999; D. A. Long & Perkins, 2003; Obst & White, 2004).

1.2.1 Differentiating a Psychological Sense of Community

PSC is similar to two other community psychology constructs: place attachment and community cohesion. Firstly, the concept of place attachment describes the emotional sentimentality and respect for physical space (cf. "place identity" and "rootedness"; reviewed by Manzo & Perkins, 2006). Place attachment is similar to PSC’s subscale of shared emotional connection in its attention to affective bonds; however, unlike place attachment, PSC locates these feelings in interpersonal relationships that transcend a sense of place. Some have proposed that PSC measurements should include attraction to physical space (e.g., W. Kim, 2012), but these features are not included in the SCI measures reviewed here.

Community (neighbourhood) cohesion (Buckner, 1988) is another related community psychology construct that is distinct from PSC for its breadth. Community cohesion includes ideas of community functioning such as social participation (which it calls “neighbouring”) and place attachment (which it calls
“attraction to neighbourhood”), in addition to PSC (which it calls by the same name). In this review, social participation is explored as a correlate of PSC.

A further distinct construct from the social science literature is social capital. This construct describes resources within a community – such as social networks, norms and trust – that facilitate social action (Putnam, 1995). Different types of social capital exist. ‘Bonding capital’ are the resources found between people who are similar, whilst ‘bridging capital’ are the resources found in relationships with people who are different, and ‘linking capital’ are the resources of associations with those in authority (De Silva, McKenzie, Harpham, & Huttly, 2005; Szreter & Woolcock, 2004). PSC can be conceived as an instance of bonding social capital if aggregated at the community-level; however, the studies reviewed here only explore PSC at the individual level.

1.2.2 Reviewing a Psychological Sense of Community in Asia

East and Southeast (hereafter E/SE) Asia is treated here as a single region, at the exclusion of South, Central and West Asia, because of the longstanding migratory, cultural and religious history that these regions share (Mabbett, 1977; Stuart-Fox, 2004). Studying PSC in this region is particularly relevant for two reasons. Firstly, personal identity and goals tend to be socially defined (S. K. Cheng, 1990). For example, such collectivistic social values are known to be stronger amongst Koreans, Thais and Indonesians compared to their American counterparts (Hofstede, 1987; Kasper, Van Helsdingen, & de Vries Jr, 1999; cited in Patterson & Smith, 2001). This is relevant to the study of PSC because such social values are associated with stronger PSC (Moscardino, Scrimin, Capello, & Altoè, 2010).
Secondly, a better understanding of PSC in E/SE Asia may help to improve understanding and mitigate the impact of rapid urbanisation of these developing societies. The United Nations’ World Urbanization Prospects Report estimated that 17% of Asians used to live in urban settings in the 1950s; this is projected to rise threefold by 2030 to a staggering 63% (United Nations, 2014). India and China together will possess 40% of the world’s population, and 23 of the 41 megacities (> 10 million people) in the world will be found in Asia. Metropolitan residents in Japan and Korea already report a greater erosion of community attitudes compared to their counterparts in regional cities or towns (Cha, 1994; Freeman, 1997; Kashima et al., 2004; Mishra, 1994). The long-term impact of such high population density and immigrant numbers on PSC, however, is unclear (Mak, Cheung, & Law, 2009; N. M. Yip, Leung, & Huang, 2013).

To further our understanding of PSC in this region, the present study systematically reviews the growing number of E/SE Asian studies that have explored its link with individual and collective functioning. In particular, most of the E/SE Asian studies in the literature have investigated the association of PSC (SCI total scores) with three operationalized constructs: subjective wellbeing, social relationships and community structures. The present meta-analysis, therefore, tests specific hypotheses for these associations.

1.2.2.1 Subjective wellbeing

There is strong evidence in Western European and North American (hereafter ‘Western studies’) of the association between PSC and subjective wellbeing: this includes ratings of personal happiness (Davidson & Cotter, 1991; Pretty, Conroy, Dugay, Fowler, & Williams, 1996), or conversely, fewer endorsements of mental
health difficulties such as loneliness, depression and anxiety (Farrell, Aubry, & Coulombe, 2004; Pretty et al., 1996; Prezza, Amici, Roberti, & Tedeschi, 2001).

To E/SE Asians, wellbeing and identity is socially constituted and is often defined in terms of interpersonal harmony (Markus & Kitayama, 1991). On this basis, it is hypothesised that there is a positive association between PSC and indicators of subjective wellbeing in the studies reviewed here (hypothesis 1a). Such indices of wellbeing, however, will not be those predicated on autonomous achievement (e.g., measures of personal mastery; Obst & Tham, 2009).

Additionally, the high prevalence of mental health stigma and self-stigmatisation in E/SE Asian communities (reviewed by Fung, Tsang, Corrigan, Lam, & Cheng, 2007; Lauber & Rössler, 2007), suggest that being part of a strong community is not always protective or rehabilitative of mental health difficulties. For this reason, it is predicted that the association between PSC and positive wellbeing will be stronger than that of reduced mental health difficulties (hypothesis 1b).

1.2.2.2 Social relationships

Strong evidence also exists in the West for the link between PSC and evaluations of relationships. First, the availability of social support from friends and family has been linked to PSC (Nasar & Julian, 1995; Obst & Tham, 2009; Pretty, 1990; Prezza & Costantini, 1998; Zani, Cicognani, & Albanesi, 2001). Second, the quantity and quality of interactions, in the form of neighbouring behaviours and participation in community activities, have also been showed to enhance PSC (Chavis et al., 1986; Farrell et al., 2004; D. A. Long & Perkins, 2007; Prezza et al., 2001; Wood, Frank, & Giles-Corti, 2010).
Similar to what has been found in these Western studies, it is predicted here that PSC will be associated with all indicators of positive social relationships (hypothesis 2a). This is especially the case since E/SE Asian cultures emphasis duty and responsibility towards others over individual rights and entitlements (Gergen, Gulerce, Lock, & Misra, 1996; Hofstede, 1987; Markus & Kitayama, 1991).

The framework by McMillan and Chavis (1986) proposed two further theories that may predict the relative importance of these relationship features. Foremost, the ‘contact thesis’ (Allport, 1954) posits that increased dosage of interaction can serve to solidify PSC through role formation (Sherif, White, & Harvey, 1955), increase mutual liking (Wilson & Miller, 1961), and neighbouring habits (Talen, 1999); it is therefore predicted that evaluations of interaction quantity will have stronger links to PSC than evaluations of social support (hypothesis 2b) that often measure potential rather than actual social interactions (e.g., Vaglio et al., 2004).

Additionally, the ‘quality-interaction thesis’ suggests that increased satisfaction and positive valuation of relationships can also promote stronger emotional bonds (reviewed by McMillan, 1996). In line with this idea, it is predicted that PSC will have a stronger relationship to relationship quality compared to social support (hypothesis 2c).

1.2.2.3 Community structures

Finally, strong lines of research in the West have established the links between PSC and perceptions of community-level resources. Foremost, residents who perceive positive residential qualities are more likely to endorse PSC; this would include neighbourhoods that have collective responsibility and commitment (D. A. Long & Perkins, 2007; Perkins et al., 1990), and the presence of good schools and work
opportunities (Davidson & Cotter, 1991). Conversely, PSC is related to having fewer social concerns (Brodsky, O'Campo, & Aronson, 1999) and experiences of intimidation (Zani et al., 2001). As for the physical environment, PSC is related to the presence of common courtyards (Nasar & Julian, 1995) and low population density (Brodsky et al., 1999).

Another set of community structures that have received increased attention is individual and corporate leadership (cf. linking social capital; Szreter & Woolcock, 2004). Current surveys in the West have demonstrated that PSC is promoted by good community organisations (D. A. Long & Perkins, 2003; Pretty, 1990), as well as effective community services and mayors (Davidson & Cotter, 1991; Prezza & Costantini, 1998).

Consistent with these results, it is predicted that there will be an overall link between PSC and the presence of good community structures (hypothesis 3a). Furthermore, given that E/SE Asian societies emphasise respect for authority as a central aspect of social harmony (see New Zealand's Mental Health Commission report on their E/SE Asian minorities; Hofstede, 1987; Yee, 2003a), it is hypothesised that effective leadership is a stronger indicator of PSC than positive residential qualities (hypothesis 3b).

A summary of the all the hypotheses tested in this review are listed here -

- Hypothesis 1a: Total PSC scores are positively associated with indicators of subjective wellbeing
- Hypothesis 1b: Total PSC scores have stronger links with indicators of positive wellbeing rather than reduced mental health (depression) difficulties
- Hypothesis 2a: Total PSC scores are positively associated with indicators of positive social relationships
- Hypothesis 2b: Total PSC scores have stronger links with indicators of interaction quantity rather than those of social support
- Hypothesis 2c: Total PSC scores have stronger links with indicators of interaction quality rather than those of social support
- Hypothesis 3a: Total PSC scores are positively associated with indicators of good community structures
- Hypothesis 3b: Total PSC scores have stronger links with indicators of effective community management rather than residential qualities

1.3 Method

1.3.1 Search and selection process

Studies were included into this review if they: (i) measured a Psychological Sense of Community (PSC) using a variant of the Sense of Community Index (SCI; Chavis et al., 2008; Koh & Kim, 2003; McMillan & Chavis, 1986; N. A. Peterson et al., 2008); (ii) reported quantitative statistics that could be used to estimate effect size; (iii) were published in the English language; (iv) recruited participants of East or Southeast (E/SE) Asian descent (see Appendix 1 for a list of these countries; United Nations, 2016); and (v) reported the association of PSC with an indicator of subjective wellbeing, social relationships or community structures as defined above. For consistency, all correlates of PSC were included if they were measured with self-rating questionnaires rather than objective indexes.
Even though PSC is conceived as a multidimensional construct, total scores on the SCI were used in this meta-analysis as most of the studies reviewed only published total-score statistics. Additionally, total scores have consistently demonstrated good internal consistency and validity (Chavis et al., 1986; Chavis et al., 2008; Koh & Kim, 2003; N. A. Peterson et al., 2008); whilst the factor structure of the PSC has not always been replicated, casting some doubt to the validity of subscale scores across contexts (Chipuer & Pretty, 1999; D. A. Long & Perkins, 2003).

Studies were selected from electronic databases without any limits set to the date of publication. The last search was done on 26 February, 2016. Searches were done using the exact terms, “sense of community”, “sense of community index”, and “sense of community scale”, in addition to the names of E/SE Asian countries and nationalities: Asian*, Chinese, Vietnam*, Korea*, Japan*, Mongolia*, Brunei*, Cambodia*, Indonesia*, Lao, Malaysia*, Myanmar, Burmese, Philippines, Filipino, Singapore*, Thai*, Timor*, Vietnam*, Taiwan*, Hong Kong’ (where the operator ‘*’ was used for word truncations).

The following databases were searched:

- Cochrane Library (1988 – present) (Wiley)
- Medline (1946 – present) (Ovid)
- PsychInfo (1806 – present) (Ovid)
- ScienceDirect (1823 – present) (Elsevier)
- SCOPUS (1960 – present)
- Web of Science (1900 – present) (CrossSearch)

Keyword searches were also done in specialist journals such as the American Journal of Community Psychology (January 1973 – December 2015), the Indian Journal of Community Psychology (March 2014 – September 2015), and the Journal of
Community Psychology (January 1973 – March 2016). The same search terms were used here as those of database searches.

The titles and abstracts of 403 articles were screened for inclusion into the study. A full-text search was only done for 86 articles that included PSC as a predictor or outcome. The reference lists of these articles were also scanned. Full-text screening excluded 66 studies: 22 did not define PSC based on McMillan & Chavis’s (1986) framework; 21 were not published in English and could not be evaluated for suitability; 8 used a single item PSC index; 4 did not present sufficient data for extraction; 3 did not measure a correlate relevant to the present review; 3 were review papers; 3 did not recruit E/SE Asian participants as defined above; and 2 published data already reported in a previous article. Fig 1 presents a flow chart of the search process. A final set of 21 samples from 20 studies were included in the present meta-analysis (see Table 1 for details).
**Fig 1** Flow chart of study selection process

372 records identified through database searching

39 additional records identified through other sources

403 records after duplicates removed; titles and abstracts were screened

317 records excluded

86 full-text articles assessed for eligibility

66 full-text articles excluded, with reasons

20 studies included in quantitative synthesis (meta-analysis)
Table 1 Features of 20 studies (21 samples) included in the present meta-analysis

<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Context</th>
<th>Sample size</th>
<th>Sense of Community measure¹</th>
<th>Aspect(s) of SOC²</th>
<th>Language used</th>
<th>Study quality³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chung and Lim (2014)</td>
<td>Korean</td>
<td>Youth from public schools and youth centres in Seoul/Kyunggi Province and Kyungsang Province</td>
<td>229</td>
<td>24-item SCI</td>
<td>M; I; F; E</td>
<td>Korean</td>
<td>2.00</td>
</tr>
<tr>
<td>S. Y. Lee (2012)</td>
<td>Korean</td>
<td>Adult immigrants in the USA</td>
<td>477</td>
<td>12-item BSCI</td>
<td>M; I; F; E</td>
<td>English</td>
<td>2.00</td>
</tr>
<tr>
<td>Min and Wong (2015)</td>
<td>Korean</td>
<td>Adult mental health service users from Kyonggi Province</td>
<td>399</td>
<td>12-item BSCI</td>
<td>M; I; F; E</td>
<td>Korean</td>
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</tr>
<tr>
<td>Jung, Lee, and Kim (2015)</td>
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<td>Adults residents from Chang-dong district</td>
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<tr>
<td>W. G. Kim, Lee, and Hiemstra (2004)</td>
<td>Korean</td>
<td>Adult members of virtual communities</td>
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<td>16-item SVCI</td>
<td>M; I; F; E</td>
<td>Korean</td>
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<tr>
<td>Sung and Kim (2013)</td>
<td>Korean</td>
<td>Student from universities in Chung-Cheong province</td>
<td>92</td>
<td>12-item SCI-2</td>
<td>M; I; F; E</td>
<td>Korean</td>
<td>1.27</td>
</tr>
<tr>
<td>Koh and Kim (2003)</td>
<td>Korean</td>
<td>Youth and adult members of virtual communities</td>
<td>172</td>
<td>4-item SVCI</td>
<td>M; I</td>
<td>Korean</td>
<td>1.55</td>
</tr>
<tr>
<td>Kono et al. (2012) sample 1</td>
<td>Japanese</td>
<td>Older adult volunteers from Yokohama City</td>
<td>857</td>
<td>8-item BSCI</td>
<td>M; I; F; E</td>
<td>Japanese</td>
<td>2.00</td>
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<td>Kono et al. (2012) sample 2</td>
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<td>8-item BSCI</td>
<td>M; I; F; E</td>
<td>Japanese</td>
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<tr>
<td>Kotozaki (2014)</td>
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<td>Adult women residents from Miyagi Prefecture</td>
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<td>24-item SCI-2</td>
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<td>Japanese</td>
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Table 1 Continued

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<th>Study</th>
<th>Population</th>
<th>Context</th>
<th>Sample size</th>
<th>Sense of Community measure</th>
<th>Aspect(s) of SOC</th>
<th>Language used</th>
<th>Study quality</th>
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<tr>
<td>E. C. W. Ng and Fisher (2015)</td>
<td>Chinese</td>
<td>Adult members from protestant Christian congregations, Hong Kong</td>
<td>268</td>
<td>12-item BSCI</td>
<td>M; I; F; E</td>
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<td>941</td>
<td>12-item BSCI</td>
<td>M; I; F; E</td>
<td>Cantonese</td>
<td>2.00</td>
</tr>
<tr>
<td>Yau (2014)</td>
<td>Chinese</td>
<td>Adult residents from Shatin and Taipo districts, Hong Kong</td>
<td>403</td>
<td>5-item BSCI</td>
<td>M; I; F; E</td>
<td>Cantonese</td>
<td>1.91</td>
</tr>
<tr>
<td>Wu and Chow (2013)</td>
<td>Chinese</td>
<td>Adult women immigrants in Hong Kong</td>
<td>296</td>
<td>8-Item BSCI</td>
<td>M; I; F; E</td>
<td>Mandarin</td>
<td>2.00</td>
</tr>
<tr>
<td>Li, Sun, He, and Chan (2011)</td>
<td>Chinese</td>
<td>Older adults residents from Chengdu City, China</td>
<td>298</td>
<td>7-item BSCI</td>
<td>M; I; F; E</td>
<td>Sichuanese</td>
<td>2.00</td>
</tr>
<tr>
<td>Huang and Wong (2014)</td>
<td>Chinese</td>
<td>Adult residents from Sichuan province, China</td>
<td>304</td>
<td>8-Item BSCI</td>
<td>M; I; F; E</td>
<td>Sichuanese</td>
<td>2.00</td>
</tr>
<tr>
<td>Poulin, Houser, and Deng (2014)</td>
<td>Chinese</td>
<td>Older adult residents from Chongqing City, China</td>
<td>147</td>
<td>8-Item BSCI</td>
<td>M; I; F; E</td>
<td>Mandarin</td>
<td>1.82</td>
</tr>
<tr>
<td>G. L. Chen, Yang, and Tang (2013)</td>
<td>Chinese</td>
<td>Adult members of a virtual community in Taiwan</td>
<td>219</td>
<td>8-Item SVCI</td>
<td>M; I</td>
<td>Taiwanese</td>
<td>1.73</td>
</tr>
<tr>
<td>Tsai, Joe, Lin, Wang, and Chang (2012)</td>
<td>Chinese</td>
<td>Adult members of a virtual community in Taiwan</td>
<td>675</td>
<td>7-Item SVCI</td>
<td>M; I</td>
<td>Taiwanese</td>
<td>1.64</td>
</tr>
</tbody>
</table>
**Table 1 Continued**

<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Context</th>
<th>Sample size</th>
<th>Sense of Community measure(^1)</th>
<th>Aspect(s) of SOC(^2)</th>
<th>Language used</th>
<th>Study quality(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurhayaty, Wimbarti, Triatmadja, and Hastjarjo (2015)</td>
<td>Indonesian</td>
<td>Adult residents from coastal regions in Java</td>
<td>476</td>
<td>10-item BSCI</td>
<td>M; I; F; E</td>
<td>Bahasa Indonesia</td>
<td>1.55</td>
</tr>
<tr>
<td>Kitnuntaviwat and Tang (2008)</td>
<td>Thai</td>
<td>Adult residents from Bangkok City</td>
<td>432</td>
<td>4-item BSCI</td>
<td>M; I; F; E</td>
<td>Thai</td>
<td>1.64</td>
</tr>
</tbody>
</table>

\(^1\) SCI= Sense of Community Index; SCI-2= Sense of Community Index version 2; BSCI= Brief Sense of Community Index; SVCI= Sense of Virtual Community Index; \(^2\) M= Membership; I= Influence; F= Fulfilment of needs; E= Shared emotional connections; \(^3\) The criteria used to measure study quality can be found in Table 2 (average scores ranged from a maximum of 2 indicating good quality and a minimum of 0 indicating poor quality).
1.3.2 Assessing study quality

Selected studies were rated by the first author, ML, using an 11-item scale adapted from Kmet, Lee, & Cook’s (2004) criteria and has demonstrated good inter-rater agreement. This scale used criteria that already existed in published tools (Cho & Bero, 1994; Timmer, Sutherland, & Hilsden, 2003) and was composed to measure the strength of the methodology in a study and the clarity of the written report. Items on this original checklist were selected, and modified by consensus after being used to assess the quality of medical research studies.

In the present review, two items from the original checklist were removed because they assessed the quality of interventions in a study: these two criteria were inappropriate for the descriptive studies reviewed here. However, one of the key quality domains not assessed by the checklist was the validity of the SCI measure used in studies. Two further items were, therefore, added to assess the quality and completeness of the SCI used in each study (items 5 and 6 in Table 2).

Checklist items were rated on a three-point scale (2= yes | 1= partial | 0= no) and a final score for each study was computed by averaging the 11 items (see last column of Table 1). Fifteen studies were randomly selected and rated by a second researcher, GHJ. An Intraclass Correlation Coefficient (ICC) revealed that the inter-rater reliability of this assessment was strong, ICC = .90. Study-quality ratings of the first author, ML, were used in subsequent analyses.
Table 2 Study Quality Scale

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Research question and objective is sufficiently described</td>
</tr>
<tr>
<td>2</td>
<td>Study design is evident and appropriate</td>
</tr>
<tr>
<td>3</td>
<td>Method of subject selection is described and appropriate</td>
</tr>
<tr>
<td>4</td>
<td>Subject characteristics are sufficiently described</td>
</tr>
<tr>
<td>5</td>
<td>Measurement of the Psychological Sense of Community (PSC) is well defined and robust to measurement bias (e.g., Cronbach’s Alpha). Study uses a version of the Sense of Community Index informed by McMillan and Chavis’ (1986) theoretical framework</td>
</tr>
<tr>
<td>6</td>
<td>Multiple aspects of PSC are measured (e.g., membership; influence; fulfilment of needs; shared emotional connections).</td>
</tr>
<tr>
<td>7</td>
<td>Measurement(s) of correlates are well defined and robust to measurement bias (e.g., Cronbach’s Alpha)</td>
</tr>
<tr>
<td>8</td>
<td>Sample size is appropriate for statistical method used</td>
</tr>
<tr>
<td>9</td>
<td>Statistical methods are described and appropriate</td>
</tr>
<tr>
<td>10</td>
<td>Results are reported in sufficient detail</td>
</tr>
<tr>
<td>11</td>
<td>Conclusions are supported by the results</td>
</tr>
</tbody>
</table>

1.3.3 Data Extraction

Pearson correlation coefficients, $r$, were used in this meta-analysis because it is a popular, and standardised, effect size that has limits between 0 and ±1 that makes it simple to interpret (Field & Gillett, 2010). Most of the studies reviewed used correlations or regressions rather than tests of group differences. In cases where $r$ coefficients were not reported, the following transformations were done.

If standardised regression coefficients, $\beta$, were reported, $r$ was estimated with the equation (R. A. Peterson & Brown, 2005)

$$r = \beta + 0.05\lambda$$  \hspace{1cm} (1)
where $\lambda = 1$ when $\beta$ is $\geq 0$, and $\lambda = 0$ when $\beta$ is $< 0$. Should unstandardized regression coefficients, $B$, be reported instead, $\beta$ was defined as (Bowman, 2012)

$$ \beta = \frac{B * SD_X}{SD_Y} $$

(2)

where $SD_X$ is the standard deviation of the predictor, and $SD_Y$ is the standard deviation of the outcome. For the few studies that only report group differences using $t$-values, $r$ was estimated using the formula (Rosenthal & DiMatteo, 2001)

$$ r = \frac{t}{\sqrt{t^2 + N - 2}} $$

(3)

where $N$ is the overall sample size. Finally, for studies that use Structured Equation Modelling (SEM), $r$ was estimated using unadjusted regression coefficients, $\beta_{unadj}$, defined as (Kline, 2005)

$$ \beta_{unadj} = \beta_{adj} * \sqrt{\alpha_X * \alpha_Y} $$

(4)

where $\beta_{adj}$ is the adjusted regression coefficients taken from the SEM model, $\alpha_X$ is the internal reliability statistic of the predictor, and $\alpha_Y$ is the internal reliability statistic of the outcome. $\beta_{unadj}$ is subsequently entered into equation (1) above to estimate $r$.

Extracted effect sizes were categorised into operationalized constructs of subjective wellbeing, social relationships and community structures. These were not taken from previous literature but were qualitative categories generated by the author and the supervisory team. Categories were composed by consensus after looking at the types of studies available for this review. A description of this process can be found in Appendix 2.

These operationalised constructs were subtyped into the following groups: (i) effect sizes for subjective wellbeing were grouped into indexes of positive wellbeing (perceived self-esteem,
life quality and life satisfaction; \( n = 4 \) or indexes of positive mental health (reported absence of depression symptoms; \( n = 4 \)); (ii) effect sizes for social relationships were grouped into indexes of social support (perceived practical help that can be obtained from the community; \( n = 4 \)), relationship quantity (level of participation in community activities; \( n = 5 \)) or relationship quality (perceived enjoyment and satisfaction with the community; \( n = 6 \)); and (iii) effect sizes for community structures were grouped into indexes of residential quality (perceived quality of the neighbourhood environment; \( n = 6 \)) or management quality (perceived quality of community programmes and leadership; \( n = 6 \)). Table 3 lists the variables that were measured and the exact self-report scales used are found at the bottom of the table.

1.3.4 Analysis

The analysis was conducted using a custom syntax for SPSS written by Field & Gillett (2010). Hedges and Vevea’s (1998) random-effects model was chosen to estimate the overall effect sizes and explore group differences. Random-effects models were used because they provided more accurate estimates for the small number of studies reviewed here, and allowed for generalisations to be made about the wider E/SE Asian community (Field, 2005). Results of the fixed effects model were also reported for comparison. Following previous guidelines (Cohen, 1969), it was recommended that correlation coefficients in meta-analyses use the classification of \( r = .10 \) for small effects, \( r = .25 \) for medium effects, and \( r = .37 \) for large effects (Carson, Schriesheim, & Kinicki, 1990).

Publication bias was estimated using: (a) Rosenthal’s (1979) fail-safe \( N \) to identify the number of unpublished studies required to render the populations effect size non-significant; and (b) a funnel plot of each study’s effect size against its standard error to identify outliers at a 95% confidence interval. Where biases were present, they were corrected for using Vevea and Woods’ (2005) random-effects sensitivity analysis.
Tests were also done to identify variables that could be moderating the association (i.e., extracted effect sizes) between SCI scores and the operationalised constructs. To test possible moderation effects of study quality, total scores on the Study Quality Scale were correlated with extracted effect sizes using Pearson’s correlations coefficients.

Additionally, the subgroupings within the operationalised constructs of subjective wellbeing \((n = 8)\), social relationships \((n = 15)\), and community structures \((n = 12)\), were analysed for their moderating effects using the same custom syntax for SPSS by Field & Gillett (2010). Group differences for each operationalised construct was assessed using chi-square tests (as done previously by Tenenbaum & Leaper, 2002): effect sizes for positive wellbeing were compared with effect sizes for positive mental health; effect sizes for social support were compared with effect sizes for relationship quantity and quality; and effect sizes for residential quality were compared with effect sizes for management quality. Meta-regressions were not used because of the small number of studies in each operationalised construct.

The above analyses were repeated (but not reported here) excluding three studies in the review that exclusively assessed online communities (G. L. Chen et al., 2013; W. G. Kim et al., 2004; Tsai et al., 2012). Since their exclusion did not alter the significant results reported below, they remained in the final analysis.

**1.4 Results**

**1.4.1 Subjective wellbeing**

The meta-analysis revealed an overall medium to large positive effect between PSC and indices of subjective wellbeing, \(r = .25, 95\% \text{ CI } [.20, .30], z = 9.64, p < .001\). No evidence of overall heterogeneity across studies was found, \(\chi^2(7) = 8.25, p > .05\) (see Fig 2C).
A fail-safe \(N\) of 527 suggested that this overall main effect was not biased by unpublished data. Though the funnel plot revealed one outlier with an effect larger than expected, the corrected population effect remained unchanged to two decimal places \((r = .25)\) after correction using selection bias models (Vevea & Woods, 2005).

Moderation analysis reported no evidence that effect sizes were associated with objective ratings of study quality, \(r = .06, p > .05\). Comparing groups, the overall association of PSC scores with positive wellbeing \((r = .29, 95\% \text{ CI} [.22, .36])\) was not significantly different from that of PSC scores with the level of mental health (depression) reported \((r = .22, 95\% \text{ CI} [.15, .28])\), \(\chi^2(1) = 2.19, p > .05\). The groups did not differ in research quality either, \(t(6) = 0.25, p > .05\) (see Fig 2A-B).
Table 3 Correlates extracted from the 20 studies (21 samples) included in the meta-analysis

<table>
<thead>
<tr>
<th>Study</th>
<th>Subjective wellbeing</th>
<th>Social relationships</th>
<th>Community structures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1= Positive wellbeing</td>
<td>1= Social support</td>
<td>1= Residential quality</td>
</tr>
<tr>
<td></td>
<td>2= Mental Health (depression)</td>
<td>2= Interaction quantity</td>
<td>2= Management quality</td>
</tr>
<tr>
<td>Chung and Lim (2014)</td>
<td>(=1) Self-esteem</td>
<td>(=3) Quality of peer relationships</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3) Quality of relationships</td>
<td>-</td>
</tr>
<tr>
<td>S. Y. Lee (2012)</td>
<td>-</td>
<td>(3) Acculturation to community</td>
<td>-</td>
</tr>
<tr>
<td>Min and Wong (2015)</td>
<td>(=2) Depression</td>
<td>(=1) Receiving social support</td>
<td>(=2) Perceived quality of mental health programmes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1) Quality of peer relationships</td>
<td>(=1) Perceived quality of local pedestrian environments</td>
</tr>
<tr>
<td>Jung et al. (2015)</td>
<td>-</td>
<td>(=2) Community activities</td>
<td>(=1) Perceived quality of local pedestrian environments</td>
</tr>
<tr>
<td>W. G. Kim et al. (2004)</td>
<td>-</td>
<td>(2) Contribution to online forum</td>
<td>-</td>
</tr>
<tr>
<td>Sung and Kim (2013)</td>
<td>-</td>
<td>(=3) Enjoyment of the community</td>
<td>(2) Perceived quality of knowledge management in the University</td>
</tr>
<tr>
<td>Koh and Kim (2003)</td>
<td>-</td>
<td>(3) Enjoyment of the community</td>
<td>(=2) Perceived leaders' enthusiasm in the community</td>
</tr>
<tr>
<td>Kono et al. (2012): 2 samples</td>
<td>-</td>
<td>-</td>
<td>(=2) Perceived quality of community association activities</td>
</tr>
<tr>
<td>Kotozaki (2014)</td>
<td>-</td>
<td>(2) Horticultural groups</td>
<td>-</td>
</tr>
<tr>
<td>E. C. W. Ng and Fisher (2015)</td>
<td>(=1) Life satisfaction</td>
<td>(2) Community activities</td>
<td>(=1) Perceived trustworthiness of the community</td>
</tr>
<tr>
<td>Mak et al. (2009)</td>
<td>(=1) Quality of life</td>
<td>(1) Receiving social support</td>
<td>(=1) Social and environmental hassles</td>
</tr>
<tr>
<td>Yau (2014)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wu and Chow (2013)</td>
<td>(=2) Depression</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### Table 3 Continued

<table>
<thead>
<tr>
<th>Study</th>
<th>Subjective wellbeing</th>
<th>Social relationships</th>
<th>Community structures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1= Positive wellbeing</td>
<td>1= Social support</td>
<td>1= Residential quality</td>
</tr>
<tr>
<td></td>
<td>2= Mental Health (depression)</td>
<td>2= Interaction quantity</td>
<td>2= Management quality</td>
</tr>
<tr>
<td>Li et al. (2011)</td>
<td>(=2) Depression*2</td>
<td>(=1) Size of social network10</td>
<td>-</td>
</tr>
<tr>
<td>Huang and Wong (2014)</td>
<td>(=2) Depression*2</td>
<td>(=1) Receiving social support14</td>
<td>(=2) Satisfaction with governmental disaster recovery capability5</td>
</tr>
<tr>
<td>Poulin et al. (2014)</td>
<td>(=1) Life satisfaction5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>G. L. Chen et al. (2013)</td>
<td>-</td>
<td>(=3) Satisfaction with community relationships12</td>
<td>(=1) Perceived social conduciveness of the online environment19</td>
</tr>
<tr>
<td>Tsai et al. (2012)</td>
<td>-</td>
<td>(=3) Satisfaction with online community13</td>
<td>(=1) Perceived shared way of speaking20</td>
</tr>
<tr>
<td>Nurhayaty et al. (2015)</td>
<td>-</td>
<td>(=2) Community activities and programmes14</td>
<td>(=2) Perceived institutional empowerment21</td>
</tr>
<tr>
<td>Kitnuntaviwat and Tang (2008)</td>
<td>-</td>
<td>-</td>
<td>(=1) Perceived social and environmental impact of tourism5</td>
</tr>
</tbody>
</table>

* Reverse scored; 1 Adapted Rosenberg’ Self-Esteem Scale (J. Y. Lee, Nam, Lee, Lee, & Lee, 2009); 2 Centre for Epidemiologic Studies Depression Scale (Chi & Boey, 1993; Gupta, Punetha, & Diwan, 2006; Radloff, 1977; Zhang & Norvilitis, 2002); 3 Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffen, 1985); 4 Ad hoc measure; 5 Peer Relationship subscale of the Academic Motivation Scale (A. Kim, 2002); 6 Acculturation Attitudes Scale (Berry, 2003); 7 Modified Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); 8 Enhancing recovery in coronary heart disease trial (ENRICHD) Social Support Instrument (Vaglio et al., 2004); 9 Lubben’s Social Network Scale-6 (Lubben & Giron, 2000); 10 Social Support Questionnaire (Doeglas et al., 2019); 11 Positive Attitude Toward Virtual Community Scale (Ajzen, 2002); 12 Modified Need for affiliation Scale (Hill, 1987); 13 Community Participation Scale (Eng & Parker, 1994); 14 Community Oriented Programs Environment Scale (Moors, 1997); 15 Ad hoc Community Commitment Scale; 16 Modified Social Trust Scale (Welch, Sikkink, Sartain, & Bond, 2004); 17 Decontaminated Hassles Scale (Kohn & Macdonald, 1992); 18 Relate Experience Scale (Schmitt, 1999); 19 Modified Shared Language Scale (Nahapet & Ghoshal, 1998); 20 Empowerment Scale (Speer & Peterson, 2000).
**Fig 2** Forest plot of the effects between a Psychological Sense of Community (PSC) and indices of subjective wellbeing

### A. Studies of positive wellbeing

<table>
<thead>
<tr>
<th>Study</th>
<th>r</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chung and Lim (2014)</td>
<td>0.27</td>
<td>0.15, 0.39</td>
</tr>
<tr>
<td>E. C. W. Ng and Fisher (2015)</td>
<td>0.31</td>
<td>0.20, 0.41</td>
</tr>
<tr>
<td>Mak et al. (2009)</td>
<td>0.24</td>
<td>0.18, 0.30</td>
</tr>
<tr>
<td>Poulin et al. (2014)</td>
<td>0.42</td>
<td>0.28, 0.54</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>0.29</td>
<td>0.22, 0.36</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(3) = 3.13, p > .05$

Test of combined effect, $z = 7.26, p < .001$

### B. Studies of mental health (depression reversed scored)

<table>
<thead>
<tr>
<th>Study</th>
<th>r</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min and Wong (2015)</td>
<td>0.26</td>
<td>0.17, 0.35</td>
</tr>
<tr>
<td>Wu and Chow (2013)</td>
<td>0.29</td>
<td>0.18, 0.39</td>
</tr>
<tr>
<td>Li et al. (2011)</td>
<td>0.15</td>
<td>0.04, 0.26</td>
</tr>
<tr>
<td>Huang and Wong (2014)</td>
<td>0.16</td>
<td>0.05, 0.27</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>0.22</td>
<td>0.15, 0.28</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(3) = 3.04, p > .05$

Test of combined effect, $z = 6.07, p < .001$

### C. Overall estimate

<table>
<thead>
<tr>
<th>Source</th>
<th>r</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>0.25</td>
<td>0.22, 0.28</td>
</tr>
<tr>
<td>Random</td>
<td>0.25</td>
<td>0.20, 0.30</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2 = 8.25, df = 7, p > .05$

Test of overall effect, $z = 9.64, p < .001$

Test of subgroup differences, $\chi^2(1) = 2.19, p > .05$

### 1.4.2 Social relationships

The analysis revealed a medium to large effect between PSC and indicators of social relationships, $r = 0.36, 95\% \text{ CI} [.24, .48], z = 5.48, p < .001$. No evidence of heterogeneity between studies was found, $\chi^2(13) = 11.61, p > .05$ (see **Fig 3D**).

A large fail-safe $N$ of 3195 indicated that this overall relationship is not likely biased by unpublished data. Outliers with effects larger and smaller than expected were identified using a funnel plot. The corrected overall effect, however, remained in the medium to large range ($r > 0.34$) after correction.
Moderation analysis showed that larger effects were associated with lower ratings of research quality, \( r = -.72, p < .01 \). Therefore, the analysis was repeated removing three studies with the poorest quality ratings (average value < 1.5; Jung et al., 2015; W. G. Kim et al., 2004; Sung & Kim, 2013). No significant correlation between study quality and effect sizes was present using the remaining studies, \( r = -.33, p > .05 \), suggesting that the previous association between effect sizes and study quality was heavily influenced by these three outliers (change in \( r^2 = .41 \)). More importantly, there remained a medium to large (albeit numerically smaller) effect between PSC and social relationships after these three studies were removed, \( r = .28, 95\% \text{ CI} [.21, .35], z = 7.29, p < .001 \).

As expected, effects of relationship quality \( (r=.41, 95\% \text{ CI} [.33, .49]) \) were significantly larger compared to studies of social support, \( \chi^2(1) = 15.37, p < .001 \). This group effect cannot be accounted for by differences in study quality, \( t(8) = 1.20, p > .05 \). However, contrary to expectation, effects of relationship quantity \( (r=.38, 95\% \text{ CI} [.18, .56]) \) were not significantly larger compared to the effects of social support \( (r=.19, 95\% \text{ CI} [.14, .24]) \), \( \chi^2(1) = 2.37, p > .05 \) (see Fig 3A-C). The removal of the three studies with poorest quality ratings did not change the group effects found.

### 1.4.3 Community structures

Lastly, the analysis revealed a large effect between PSC and perceptions of community structures, \( r = .38, 95\% \text{ CI} [.26, .49], z = 5.64, p < .001 \). No evidence of heterogeneity between these studies was found, \( \chi^2(12) = 10.61, p > .05 \) (see Fig 4C).

A large fail-safe \( N \) of 6652 studies showed that this overall effect is not likely biased by unpublished data. Though the funnel plot showed outlier on both tails of the graph, the adjusted overall effect remained in the large range \( (r > .37) \) after correction.
Moderation analysis showed that overall effects for community structures were not associated with ratings of study quality, $r = .06$, $p > .05$. As expected, group differences revealed that effects of good community management ($r = .52$, 95% CI [.42, .60]) were significantly larger than effects of residential quality ($r = .21$, 95% CI [.11, .30]), $\chi^2(1) = 18.41$, $p < .001$ (see Fig 4A-B). This group effect cannot be explained by variations in the study quality, $t(11) = -0.39$, $p > .05$. 
**Fig 3** Forest plot of the effects between a Psychological Sense of Community (PSC) and indices of social relationships

### A. Studies of social support

<table>
<thead>
<tr>
<th>Study</th>
<th>r</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min and Wong (2015)</td>
<td>.18</td>
<td>.08, .27</td>
</tr>
<tr>
<td>Mak et al. (2009)</td>
<td>.16</td>
<td>.10, .22</td>
</tr>
<tr>
<td>Li et al. (2011)</td>
<td>.28</td>
<td>.17, .38</td>
</tr>
<tr>
<td>Huang and Wong (2014)</td>
<td>.19</td>
<td>.08, .30</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>.19</td>
<td>.14, .24</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(3) = 3.02, p > .05$

Test of combined effect, $z = 7.50, p < .001$

### B. Studies of relationship quantity

<table>
<thead>
<tr>
<th>Study</th>
<th>r</th>
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<tbody>
<tr>
<td>Jung et al. (2015)</td>
<td>.58</td>
<td>.48, .66</td>
</tr>
<tr>
<td>W. G. Kim et al. (2004)</td>
<td>.57</td>
<td>.49, .64</td>
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<tr>
<td>Kotozaki (2014)</td>
<td>.16</td>
<td>-.14, .43</td>
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<td>E. C. W. Ng and Fisher (2015)</td>
<td>.29</td>
<td>.18, .40</td>
</tr>
<tr>
<td>Nurhayaty et al. (2015)</td>
<td>.17</td>
<td>.11, .23</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>.38</td>
<td>.16, .56</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(4) = 3.38, p > .05$

Test of combined effect, $z = 3.28, p = .001$

### C. Studies of relationship quality

<table>
<thead>
<tr>
<th>Study</th>
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<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chung and Lim (2014)</td>
<td>.21</td>
<td>.08, .33</td>
</tr>
<tr>
<td>S. Y. Lee (2012)</td>
<td>.40</td>
<td>.32, .48</td>
</tr>
<tr>
<td>Sung and Kim (2013)</td>
<td>.61</td>
<td>.46, .72</td>
</tr>
<tr>
<td>Koh and Kim (2003)</td>
<td>.41</td>
<td>.28, .53</td>
</tr>
<tr>
<td>G. L. Chen et al. (2013)</td>
<td>.43</td>
<td>.32, .53</td>
</tr>
<tr>
<td>Tsai et al. (2012)</td>
<td>.44</td>
<td>.38, .50</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>.41</td>
<td>.33, .49</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(5) = 7.09, p > .05$

Test of combined effect, $z = 8.94, p < .001$

### D. Overall estimate

<table>
<thead>
<tr>
<th>Type</th>
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<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Random</td>
<td>.35</td>
<td>.26, .43</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(14) = 14.99, p > .05$

Test of overall effect, $z = 7.60, p < .001$

Test of subgroup differences

- **relationship quantity vs. social support**, $\chi^2(1) = 2.37, p > .05$
- **relationship quality vs. social support**, $\chi^2(1) = 15.37, p < .001$
**Fig 4** Forest plot of the effects between a Psychological Sense of Community (PSC) and indices of community structures

### A. Studies of residential quality

<table>
<thead>
<tr>
<th>Study</th>
<th>$r$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jung et al. (2015)</td>
<td>.15</td>
<td>.02, .28</td>
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<tr>
<td>E. C. W. Ng and Fisher (2015)</td>
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<td>G. L. Chen et al. (2013)</td>
<td>.12</td>
<td>-.01, .25</td>
</tr>
<tr>
<td>Tsai et al. (2012)</td>
<td>.10</td>
<td>.02, .17</td>
</tr>
<tr>
<td>Kitnuntaviwat and Tang (2008)</td>
<td>.22</td>
<td>.13, .31</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>.21</td>
<td>.11, .30</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(5) = 3.48$, $p > .05$
Test of combined effect, $z = 4.19$, $p < .001$

### B. Studies of effective community management

<table>
<thead>
<tr>
<th>Study</th>
<th>$r$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min and Wong (2015)</td>
<td>.23</td>
<td>.13, .32</td>
</tr>
<tr>
<td>Koh and Kim (2003)</td>
<td>.43</td>
<td>.30, .54</td>
</tr>
<tr>
<td>Sung and Kim (2013)</td>
<td>.68</td>
<td>.55, .78</td>
</tr>
<tr>
<td>Huang and Wong (2014)</td>
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<td>.40, .57</td>
</tr>
<tr>
<td>Nurhayaty et al. (2015)</td>
<td>.56</td>
<td>.51, .60</td>
</tr>
<tr>
<td>Kono et al. (2012; sample 1)</td>
<td>.54</td>
<td>.49, .59</td>
</tr>
<tr>
<td>Kono et al. (2012; sample 2)</td>
<td>.62</td>
<td>.60, .64</td>
</tr>
<tr>
<td>Combined (Random)</td>
<td>.52</td>
<td>.42, .60</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(6) = 7.73$, $p > .05$
Test of combined effect, $z = 9.09$, $p < .001$

### C. Overall estimate

<table>
<thead>
<tr>
<th>Method</th>
<th>$r$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
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<td>.46, .49</td>
</tr>
<tr>
<td>Random</td>
<td>.38</td>
<td>.26, .49</td>
</tr>
</tbody>
</table>

Heterogeneity, $\chi^2(12) = 10.61$, $p > .05$
Test of overall effect, $z = 5.64$, $p < .001$
Test of subgroup differences, $\chi^2(1) = 18.41$, $p < .001$
1.5 Discussion

The present findings support the important place a Psychological Sense of Community (PSC) has for individual wellbeing in East and Southeast (E/SE) Asia. It also revealed the types of community variables that promote its development. Associations – of medium to large effects – between PSC and measurements of subjective wellbeing, social relationships and community structures, were clearly observed in the reviewed studies. Critically, for indicators of social relationships, we found that relationship quality has a stronger association with PSC than social support. As for indicators of community structures, effective community management has a larger effect compared to residential quality.

The meta-analyses also provided evidence that these results cannot be accounted for by publication biases, or the quality of the studies reviewed. In fact, the ratings of study quality achieved excellent inter-rater reliability in this review (ICC = .90). A further strength of this systematic review is the selection of studies that used valid Sense of Community Indexes (SCIs) that share a common theoretical framework (cf. McMillan & Chavis, 1986), so aiding the interpretation of the results (Chipuer & Pretty, 1999).

The main findings of this meta-analysis are correlational and no causal relationship can be specified with certainty; nevertheless to focus the following discussion, the review considers the possible influence of PSC on subjective wellbeing, and the impact of social relationships and community structures on PSC development. This is done with the objective of suggesting psychological mechanism(s) for future research that could determine the direction of causality.
1.5.1 Sense of community and subjective wellbeing

The significant positive relationship between PSC and all indices of subjective wellbeing investigated here (such as ratings of life quality, good self-esteem, life satisfaction, and fewer depression symptoms) supports hypothesis 1a. These results also replicate the general pattern of findings coming from Western studies that demonstrate how PSC is associated with perceived happiness and enjoyment of life (e.g., Davidson & Cotter, 1991; Pretty et al., 1996).

The consistent link between PSC and well-being across cultural contexts suggest a common community psychological mechanism for health and resilience. Similar to the West, social networks in E/SE Asia probably fulfil basic needs for social identity and social support (Obst & Tham, 2009; Prezza et al., 2001), or protect against loneliness and alienation (Pretty et al., 1996; Sarason, 1974).

However, there may also be a particular meaning attached to community life in E/SE Asia that is unlike those found in the West. In particular, qualitative reports from an E/SE Asian perspective suggest that social intimacy promotes well-being because it produces a deep sense of “contentment” (for an anthropological account see Hsu, 1971, p.35) and certainty for the future (cf. "strong uncertainty avoidance" societies; Hofstede, 1987). This is possible because cultures like the Chinese view kinship relationships as automatic, permanent and thoroughly stable (Hsu, 1971).

Contrary to hypothesis 1b, the link between PSC and positive wellbeing was not statistically stronger compared to the link between PSC and reduced depression. The association of PSC with reduced depression is consistent with results from Western samples (e.g., Farrell et al., 2004; Prezza et al., 2001), but was not predicted in E/SE communities because of the strong mental health stigma within these communities.
(Fung et al., 2007; Lauber & Rössler, 2007). However, the findings here suggest that in spite of mental health stigma PSC remains a cross-cultural aspect of communities that can enhance the protective or remedial effects of mental health difficulties like depression; in particular, the perceived inclusion and fulfilment of needs (as measured by the SCI) within these communities probably mitigates the effects of stressful life events such as emigration and earthquakes (Huang & Wong, 2014; Li et al., 2011; Wu & Chow, 2013).

1.5.2 Sense of community and social relationships

In support of hypothesis 2a, evaluations of social relationships have positive links with PSC. These results confirm the association between well-functioning interpersonal relationships and PSC found in Western literature (Obst & Tham, 2009; Pretty, 1990; Prezza et al., 2001; Wood et al., 2010; Zani et al., 2001). It possibly highlights common cross-cultural processes. For example, where personal relationships function to provide relationship templates (Chung & Lim, 2014) and a sense of safety (Zani et al., 2001) that promotes broader community trust and PSC.

However, the individual Western studies cited above do not investigate the relative strengths of associations between PSC and aspects of social relationships such as social support, interaction quantity and relationship quality. Supporting McMillan’s (1996) ‘quality-interaction thesis’ (hypothesis 2c), this study found that indicators of relationship quality have stronger links with PSC compared to those of social support. One explanation for this could be that good interaction enhances community-specific enjoyment (Koh & Kim, 2003; Sung & Kim, 2013), satisfaction and integration (G. L. Chen et al., 2013; S. Y. Lee, 2012; Tsai et al., 2012). These are psychological processes that may not be achieved by mere expectations of receiving social support. This suggests that affective ties between E/SE Asian people are more
important for PSC than the functional roles of looking out for others in the community (Hofstede, 1987; Hsu, 1971). The observation that Hong Kong Chinese people qualitatively report stronger affections with those they have affiliative bonds supports this possibility (e.g., colleagues and schoolmates; Forrest, La Grange, & Ngai-Ming, 2002).

A surprising result, however, was how interaction *quantity* and social support did not differ in their strength of association with PSC (contra hypothesis 2b). An explanation for this could be how superficial social contact only promotes functional reciprocity (Talen, 1999) rather than deep affective intimacy (Sherif et al., 1955; Wilson & Miller, 1961). An alternative interpretation could be that social contact is not always positive and could sometimes erode PSC by increasing competitive and distrustful attitudes (see 'conflict thesis' reviewed by Putnam, 2007).

### 1.5.3 Sense of community and community structures

Finally, it was found that perceived effectiveness of *community structures* – i.e., good residential quality, and effective community management – is associated with stronger PSC. This confirmation of hypothesis 3a is consistent with data from Western studies (Brodsky et al., 1999; Davidson & Cotter, 1991; Prezza & Costantini, 1998; Wood et al., 2010), and suggests multiple avenues to redress the harmful effects of poor community cohesion in urban E/SE Asian societies (Cha, 1994; Freeman, 1997; Kashima et al., 2004; Mishra, 1994). In particular, PSC can be enhanced through improvements in neighbourhood environments that increase opportunity for social interaction (Brodsky et al., 1999; Wood et al., 2010); or good leadership and programmatic provisions that facilitate relationship-building and collective action (Koh & Kim, 2003; Nurhayaty et al., 2015; Sung & Kim, 2013).
Critically, as expected, the results showed that perceived good community management had a stronger relationship to PSC than residential features of the community (confirming hypothesis 3b). Specifically, self-ratings of good community institutions and programmes (Huang & Wong, 2014; Kono et al., 2012; Min & Wong, 2015; Sung & Kim, 2013), and self-ratings of leadership enthusiasm and empowerment (Koh & Kim, 2003; Nurhayaty et al., 2015), are possible strategies for community development over and above residential concerns.

One explanation for the importance of community management for PSC development can be explained by cultural values. As argued elsewhere (S. T. Cheng & Mak, 2007; Wilding, 1997), strong kinship loyalties in E/SE Asia can limit one’s civic responsibilities to broader society. This view is supported by sociological observations of rural Chinese people lacking “principled moral thinking” when interacting with other outside their kinship network (S. K. Cheng, 1990 p. 510; Fei, 1967); this was most clearly observed in acts of bureaucratic corruption that favoured their own family members. It is in this context that strong community management may have been the required means to redress such in-group tendencies and ensure equal access to community resources.

1.5.4 Policy implications in E/SE Asia

Following trends in developed societies (Putnam, 1995), rapid urbanisation in developing E/SE Asia will likely weaken traditional social structures (Cha, 1994; Freeman, 1997; Kashima et al., 2004; Mishra, 1994). As large numbers of illegal and rural-to-urban migration takes place (K. W. Chan & Zhang, 1999; Yamanaka & Piper, 2005), the region will have to face the reality of multicultural city centres. The diverse makeup of metropolitan areas in E/SE Asia is, therefore, the context in which the following policy recommendations are formulated.
First, the connection between PSC and subjective wellbeing commends policies that promote greater sense of *membership, mutual influence, integration and fulfilment of needs*, and *shared emotional connection* at all levels of societies. However, PSC is double edged because *membership* marks out those who belong (‘us’) from those who do not (‘them’; Wiesenfeld, 1996 p. 338). For this reason, it may be important that policies also work to strengthen PSC amongst minority groups (Sonn, 2002). Though counterintuitive, qualitative evidence shows that strong in-group PSC (i.e., greater bonding social capital) can provide a secure base for increased out-group interaction and cooperation in highly segregated and distrustful situations (Campbell, Hughes, Hewstone, & Cairns, 2010).

Second, policies that promote PSC through inter-group interactions need to consider the *quality* of these interactions. In a region with increasing cultural diversity, the meaning that minority and majority groups give to these interactions needs to be understood (Fisher & Sonn, 1999). An uncritical promotion of increased interactions to promote unity in diverse communities, without an understanding of the meaning of these interactions, might have diminished returns (Sonn, 2002).

Third, this review calls attention to the critical role that good management of E/SE Asian grassroots organisations have for community development (Putnam, 2007). One way governments can do this is by enhancing the quality of existing relational networks (e.g., kinship, religious and cultural groups) that bring people of different backgrounds together (i.e., increasing bridging social capital; Wilding, 1997; Yee, 2003a). Nevertheless, caution should be exercised as PSC is not always a positive force in society (Bess et al., 2002). Strong emotional bonds with an Anorexia-promoting online community is a case in point (Norris, Boydell, Pinhas, & Katzman, 2006).
Additionally, as urbanisation and social diversity erode PSC in the short to medium term (Gui, Ma, & Mühlhahn, 2009; Putnam, 2007), coordinated efforts to promote shared values and provide broader conceptions of unity in diversity is more likely to succeed in E/SE Asia with strong governmental and institutional support (C. Y. Chiu, 1990; N. E. Long, 1958; Sonn, Bishop, & Drew, 1999; Wiesenfeld, 1996).

1.5.5 Limitations and future research

It is recognised that current PSC theory and scale development have largely been produced for the purposes of Western European and North American contexts (S. T. Cheng & Mak, 2007). This is problematic as items on the SCI are culture dependent and may carry different meaning across contexts (Sonn et al., 1999).

However, as recommended elsewhere (Townley, Kloos, Green, & Franco, 2011), this limitation has been mitigated by interpreting the data with sensitivity to the E/SE Asian culture that it was taken from. Additionally, this review was not conducted to ‘validate’ the applicability of the SCI in E/SE Asia, but rather, to use available data pragmatically, and take into account the most prominent PSC theory currently available.

It is acknowledged, nonetheless, that PSC theory needs further exploration with particular attention given to the political and social circumstances of E/SE Asian communities (cf. García, Giuliani, & Wiesenfeld, 1999; Proescholdbell, Roosa, & Nemeroff, 2006). Future research would also benefit from first-hand accounts of how diversity (Wiesenfeld, 1996), and not just homogeneity, constitutes E/SE Asian community life (see various approaches reviewed by Bess et al., 2002).

One further limitation of this study is the loose definition of operationalised constructs like “residential qualities” and “management qualities”. This limits the
interpretive and practical implications of the results. Future studies could work toward using more common, and standardised, measures.

A final limitation of the study is the use of self-report measures. This was done for consistency, but may have overestimated the strength of correlations reported; participants who rated high on the PSC might also have optimistic view about other aspects of community life (see review of "Method Bias" by Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future studies that use more objective ways of measuring social relationships and social structures, in particular, will help to redress this bias.

1.5.6 Conclusion

The present study investigated how psychological (cognitive) aspects of community life in E/SE Asia are important for life quality and protection from mental health difficulties. At the interpersonal-level, the quality of social interactions is a better promoter of PSC than the availability of social support in times of need. Finally, at the community-level, strong governance and good community institutions are more critical than the social and infrastructural features of residential areas. These results confirm PSC as a core construct to understand individual and corporate wellness (McMillan & Chavis, 1986; Sarason, 1974); especially in a context where the values for strong social intimacy and hierarchy are strong (Hofstede, 1987; Hsu, 1971), and social diversity is likely to increase due to large-scale migration (K. W. Chan & Zhang, 1999; United Nations, 2014; Yamanaka & Piper, 2005).
1.6 References


Part 2. **The empirical paper**

Validation of a Vietnamese Mental Health Recovery Scale (VRS) in a community sample of Vietnamese refugees living in the UK – A mixed methods study
2.1 Abstract

Aims: Recovery approaches to psychological wellbeing promote a view of health and wellness that is defined by service users’ rather than professional opinion or institutional goals. A growing number of measures for recovery are now available in the English language; however, a validated scale for recovery amongst East Asians, and in the Vietnamese language in particular, is lacking. Method: Thirteen Vietnamese refugees recruited from a London-based charity were invited to two focus groups to generate and elaborate on content domains for the development of a Vietnamese Mental Health Recovery Scale (VRS). An expert panel of professionals familiar with the culture selected a final set of questionnaire items. To validate this instrument, forty-eight service users completed the VRS in addition to self-assessments of wellbeing and mental health, and received professional assessments of general functioning. Results: A final 15-item VRS demonstrated good reliability and its concurrent and divergent validities were also supported. Recovery processes measured include meaningful social roles and interactions, self-management of problems, and spiritual attitudes and living. Conclusions: The recovery processes assessed by the VRS are compatible with the social philosophy and religious values of the Vietnamese people. Its suitability to support future development of recovery-oriented community psychology programmes for Vietnamese refugees is discussed.

2.2 Introduction

2.2.1 Mental health recovery past and present

Mental health recovery, as conceived by the biomedical (disease) model, is equated with the reduction of psychiatric symptoms on diagnostic tests (see review by
Leamy, Bird, Le Boutillier, Williams, & Slade, 2011). Though these efforts to reduce distress and disability are worthy goals, they often discount service users’ perspectives and result in a narrowed understanding of health and wellness (see Mead & Copeland, 2000 for a "survivors" account). The move away from privileging health professionals’ perspectives have led many to think of recovery not only in terms of the good life after illness, but also, the good life through illness; the biomedical view of health is, thus, taken to be one of many reference points to being ‘well’ (Mental Health Commission, 2000, p.41), being invigorated with ‘new meaning and purpose’ (Anthony, 1993, p.527), and ‘being more human’ (Deegan, 1996, p.92).

Since the 1990s, there have been concerted efforts by mental health researchers and clinicians to accommodate service users’ perspectives to mental health provision (Anthony, 1993). Over the last two decades, the UK, US, and New Zealand have published at least 12 policy documents to facilitate the incorporation of these principles into their respective mental health systems (review by Le Boutillier et al., 2011).

The UK has followed the lead of New Zealand’s treatment of its Maori minority (New Zealand’s mental health commission report; Yee, 2003b) and has now recognised how culture inevitably influences our understanding of mental health recovery (e.g., Joint Position Paper between the UK Care Services Improvement Partnership, Royal College of Psychiatrists, and Social Care Institute for Excellence; Wallcraft, Tew, Griffiths, & Nicholls, 2007). Underlying these developments is the recognition that sociocultural contexts provide distinct recovery narratives that impact on what is counted as evidence for recovery (Ridgway, 2001; Roberts, 2000). A qualitative synthesis of recovery processes in the literature has confirmed the
cultural-dependence of recovery concepts. Compared to English-speaking groups, people from black and minority ethnic backgrounds were found to emphasise (distinctively) the role of spirituality, community, and stigma in their recovery (Leamy et al., 2011).

2.2.2 Understanding mental health recovery in East Asia

To understand recovery in East and Southeast (E/SE) Asian communities like the Chinese, Japanese, Korean and Vietnamese, the ancient philosophies of Daoism, Confucianism, and Buddhism must be considered (C. Chan, Ho, & Chow, 2002; Hoang & Erickson, 1985; C. S. Lam et al., 2010; K. S. Yip, 2004).

Daoism as conceived by the Chinese philosopher Lao Tzu 老子 (approximately 600 B.C.E.) introduced the idea that life is organised in reciprocal balance and harmony (e.g., activity-inactivity or independence-dependence; Hoang & Erickson, 1985; K. S. Yip, 2004). The relationships between these poles are conceived as dynamic forces for 阴 yīn and 阳 yáng that are in constant flux. Health and wellness are achieved through the balance and harmony of these life forces across the physical, social, and spiritual levels of existence (Jenni, 1999); whilst illness and suffering are the result of imbalance and disharmony caused by living in excess, struggle, and competition (C. Chan et al., 2002).

The Chinese philosopher Confucius 孔子 (551-479 B.C.E.) later embedding Daoist metaphysics of harmony within particular family and community structures (Tseng, 1973; Yee, 2003b). He suggested that the primary function and purpose of humanity is to mature in 仁 rén (benevolence or humanity), and the practice of 礼 lǐ (propriety or proper conduct) is the means by which 仁 is achieved (see The Analects; Silingerland, 2005). The most fundamental expression of lǐ is the observance of
proper reciprocal relationships (e.g., elder to junior, parent to child, husband to wife, elder sibling to younger sibling). Filial piety towards living elders, and ancestral worship, are viewed as proper and right (Jellema, 2007; Analects 1.3; Slingerland, 2005).

Daoism and Confucianism have significantly influenced how East-Asians understand mental health recovery. This is clearly evident in how wellness is defined by the quality of one’s social life (Hsiao, Klimidis, Minas, & Tan, 2006; Tse, 2004), and where self-interest is successfully controlled in the interest of the community goals (L. M. Chen, Miaskowski, Dodd, & Pantilat, 2008).

The benefits of communal living amongst East-Asian psychiatric patients are well known: they identify interpersonal harmony (Hsiao et al., 2006; R. M. K. Ng et al., 2008), and family and community membership (M. M. L. Lam et al., 2011; Siu et al., 2012) as one of the most important factors for recovery. This would explain the surprising finding that Chinese service users in interdependent care homes report higher life satisfaction compared to those living in less restrictive supported accommodations (G. W. L. Chan, Ungvari, Shek, & Leung, 2003).

However, an imbalance in community relationships could also have pernicious consequences on recovery. This can take the form of absolute parental authority and familial over involvement in care and treatment decisions (R. M. K. Ng et al., 2008; Nguyen & Williams, 1989). It can also be experienced as a strong sense of shame for failing to fulfil cultural expectations to provide for and earn the respect of the family (Hsiao et al., 2006). Shame could also be intensified by the perceived, or real, loss of a family’s standing in the community because of the stigma associated with mental health problems (Lauber & Rössler, 2007; Siu et al., 2012).
In addition to Daoist and Confucian ideas, Buddhist philosophy has also shaped East-Asian views of recovery through its (re)interpretation of pain and suffering (L. M. Chen et al., 2008). Buddhism entered East-Asia through India around the 7th century A.D. (Ch’En, 2015), and introduced ideas of Samsāra (or reincarnations) and Karma. This is the belief that all human action has consequences in the next life, and all human suffering in the present has its origins in a previous life (C. S. Lam et al., 2010). Suffering is thought of as part of the human condition and is accepted with equanimity rather than challenged (C. S. Lam et al., 2010). This attitude of acceptance is further reinforced by the Daoist idea that suffering (yīn) augments one’s appreciation of its counterpart, happiness (yáng), and can be endured because it is not a permanent state of affairs (L. M. Chen et al., 2008).

Previous reports suggest that such fatalistic beliefs promote wellbeing through an enlightened Buddhist perspective of disinterest (C. S. Lam et al., 2010), or a Daoist attitude of hopeful quiescence (K. S. Yip, 2004). However, accepting mental ill health may also have negative impacts on health outcomes. For example, allowing problems to take their ‘natural’ course could delay access to professional help where needed (Hoang & Erickson, 1985, p.232). Attitudes of acceptance may also facilitate (unhelpfully) the internalisation of mental health stigma common within East-Asian societies (Fung et al., 2007).

2.2.3 Measuring mental health recovery in East-Asia

Few quantitative studies have investigated East-Asian recovery (Chiba, Miyamoto, & Kawakami, 2010; M. Y. L. Chiu, Ho, Lo, & Yiu, 2010; Siu et al., 2012). The studies that have done so have validated Japanese and Chinese translations of recovery scales developed within English-speaking contexts. They confirm the cross-cultural validity of some recovery content domains found in Anglophone cultures; they do
not, however, specify the priority of these recovery processes within East-Asian cultures. Therefore, the validation of borrowed (albeit translated and accommodated) recovery measures cannot replace the development of culturally-native ones. To the author’s knowledge, no validated recovery scale in the Vietnamese language is currently available.

To fill this gap, the present study aims to develop and validate a novel Vietnamese Mental Health Recovery Scale (VRS). Questionnaire items will be generated or adapted based on focus groups with Vietnamese refugees residing in the UK. An expert panel of healthcare professionals familiar with East-Asian culture will be consulted throughout this process. Using measures that have also been used in previous validation studies (Burgess, Pirkis, Coombs, & Rosen, 2011; Campbell-Orde, Chamberlin, Carpenter, & Leff, 2005), the validity of the VRS will be tested quantitatively by comparing its ratings with self-report assessments of general wellbeing and mental health symptoms, and professional assessments of general functioning.

It is hypothesised that scores on the VRS will correlate positively with service user ratings of general wellbeing and functioning; and negatively with the number of endorsed mental health complaints. It is also predicted that recovery scores will discriminate service users with stronger social roles – i.e., service users in a long-term relationship as opposed to those who are single.

2.3 Method

Ethics approval for this research project was sought from the University College London Research Ethics committee (Project ID: 6600/001; see Appendix 3 for the approval letter, Participant Information Sheet and consent form).
2.3.1 Focus Groups

2.3.1.1 Participants
Thirteen service users (nine males) were recruited from the Vietnamese Mental Health Service (VMHS; www.vmhs.org.uk) and split across two focus groups to maximize participation. These conversations were used to generate and elaborate on recovery content domains. Existing conceptual frameworks for recovery found in the literature (e.g., CHIME; Leamy et al., 2011) were not used as a guide to the discussion to avoid narrowing the discussion prematurely. For this reason, no set interview schedule was used in the focus groups. The mean age of the interviewees was 52.46 years (SD = 6.34). This age distribution was typical of the Vietnamese refugees that accessed the service.

2.3.1.2 Procedure
Focus groups were conducted in both the Vietnamese and English languages at the VMHS by the first author, ML, and the lead support worker at the VMHS, TH. As ML did not speak Vietnamese, TH acted as the translator for participants that spoke minimal English. The VMHS offers counselling services, case management, and translation services to support Vietnamese people and their families experiencing any kind of mental health difficulty. This would include depression, anxiety, addiction and more enduring presentations such as psychosis. They also run community-based activities and a drop-in-centre.

Focus groups took about 90 minutes to complete. Interviewees were informed that the purpose of the study was to better understand what recovery from mental health meant to the Vietnamese people. Participants were then invited to generate content...
domains they felt were important to them and follow-up questions were used to explore each domain in detail.

Interviews were audio recorded and transcribed. To preserve confidentiality, interviewees were allocated index numbers (i.e., M1-9 for males and F1-4 for females). The transcripts were subject to an interpretive thematic analysis as described by Braun and Clarke (2006). Exact quotes were identified as codes and put together into themes if they were related in content. The first author, ML, developed these themes iteratively with collaborators, OM and AB, and these are presented below with illustrative quotes. Where there was a disagreement about whether themes reflected the raw data, this was resolved by consensus. To make sure that important content domains were not missed out, themes were included even if they were not mentioned by a majority of the respondents (Vogt, King, & King, 2004). Finally, the language and colloquialisms used by respondents were preserved as far as possible at every stage of the analysis and development of the VRS.

2.3.1.3 Interview themes

The analysis revealed three aspects of recovery that were important to Vietnamese respondents: (i) a spiritual life; (ii) harmony in the family; and finally (iii) understanding in the community.

Spiritual life. Eight of the interviewees described how the Vietnamese are a ‘spiritual people’ (M5) who believe that all actions have consequences (i.e., beliefs in ‘Karma’; M6; M9; F6). From this point of view, at least some aspect of recovery can be viewed as a consequence of good work, for

“if you do good in this life you will receive the good” (M9)
Four of the interviewees reported how religious practices such as prayer, offerings to dead relatives and chanting have also given them peace of mind. This was said in the context of the belief that illnesses are the consequence of personal actions in a past life (Hoang & Erickson, 1985). One interviewee reasoned that

“If you belief in faith then you have to use faith to cope with your stress and sadness. If you are sad, you can pray to Buddha and have peace of mind.”

(M7)

Harmony in the family. Most of the interviewees described the importance of family life for mental health recovery because good family life brings ‘happiness’, ‘harmony’, and the security of being ‘looked after’ (M1; M5; F1; F2; F3; F4). However, most of the interviewees also emphasised that broken family relationships was a pathway to mental health problems and isolation. This was particularly the case for Vietnamese living in the UK because their adult children do not live with them and extended family support is weak:

“a lot of people with mental problem here [in the UK]...have a broken relationship...So I think this lead to problem...Some people have a broken relationship so they quite bitter with what happen with their life, and that lead to isolation, and [further] mental health problems.” (F3)

Seven of the interviewees reported that a core factor for the disharmony in family life has been the loss of their roles as parents. They talked about how their children are no longer ‘obedient’, and they do not ‘understand’ nor ‘listen’ (F1; F2; F3; F4; M1; M5; M6). Many interviewees believed that this discord in parent-child relationships happened because their children grew up in a foreign (British) culture and demand more independence. They also attribute this loss of respect from their children to their personal history of severe mental health problems (see Box 1a).
Box 1. Challenges of Vietnamese family and community life in the UK

a. Breakdown in parent-child relationships

“Here we come to the different culture [i.e., British culture], they [the British] tend to respect having oneself...because they want to have privacy. They want things for themselves. Example, when [your children] grow up or are teenagers, they come home and close their [room] door, and whatever they do in their room is their business. But in Vietnam you don’t have doors or rooms.” (F1)

“The children they are not understanding of what the parent have been through with their illness. Because they are born here, they are very well in terms of...mental health and their physical health, and they are living their own life. And because they do not sympathise, they do not try to understand the way that we feel. And therefore...because of that it contributes to the fact that instead of getting support and sympathy from the children they become more demoralised; their mental health get more worse.” (F2)

b. Stigma from the community for being single

“...I hate it. Vietnamese people often like [to] criticise... [other people for their lack of] relationship[s]. That [is] difficult if you... [are] single...For people here [in the UK]...think [singlehood] is normal, but in Vietnamese community that is [a] big issue. People often gossip and criticise, yeah...In Vietnam when people [are] single...they [are seen to] lack confidence. [If someone does not have a] girlfriend or boyfriend, [others] talk at the back. Difficult for them to bear if they have some mental problem.” (F3)

Both male and female interviewees also reported how mental health difficulties have limited Vietnamese men’s roles as fathers and husbands. Their inability to “lead” or be a “breadwinner” (F3; M1) was described by one of the respondents as rather shaming:

“Men [in Vietnam] tend to be the bread winner. Therefore if [they] don’t earn money [they] feel ashamed, [and] lack confidence...I am one example...If I don’t earn money, I do not receive the respect from my partner and I am feeling kind of ashamed and being disrespect[ed]...Because every time when [I] ask [for] money from my partner...I tend to receive kind of, um, bad mouth from my partner...When I go out...I meet...all the men you know [and I
am]...disrespected. Looked down by other people because [of] the role that I did not...play." (M1)

Understanding in the community. Seven of the interviewees reported that support from the Vietnamese community was important for their mental health recovery because the community provided “care”, “protection”, “help”, “love”, and “understanding” (F1; F2; F4; M6; M7; M8; M9). This need for the community is heightened for the Vietnamese living in the UK because of the perceived exclusion they experience; two respondents described this struggle as “doors” that were closed to them (F4; M3):

“Life [here] is completely different from Vietnam because [of] the environment and the way of life. So it make people [who] have a mental problem more serious. In Vietnam we can open door and we can see neighbour. And if you don’t have a family you can talk to neighbour and find friend easily.” (F3)

Respondents reported that a clear barrier to integration outside the Vietnamese community was their poor grasp of the English language. This limited their sense of connectedness to others (F1; F3; M5), their ability to express themselves (F1), and their access to activities and information (F1; F2; F4; M6):

“Because [of] the language barrier I would have difficulty to communicate not only to the outsider [i.e., people outside the Vietnamese community] but also within the family [i.e., children who have a poor grasp of the Vietnamese language]. It forced me to learn English. And by doing that it help me in terms of communicating and expressing my views...It also help me to go out and to speak to other people as well. What I am trying to do now...is go out to engage and to find out more. Learning more...helps me to help myself.” (F1)

Most interviewees also described the pernicious aspects of Vietnamese community life as “social pressure” (F1; M2). This would include worries that others might find out about their mental health difficulties, unemployment and dependence on welfare benefits (F1; F3; M2). Critically, one of the married women in the group (F3) felt she had to speak up for single Vietnamese men by saying that they were often criticised
by the wider Vietnamese community for not keeping to the social convention of having a family (see Box 1b).

The themes here emphasised the relational features of recovery amongst Vietnamese respondents. Mental health recovery is understood with respect to connection with (or exclusion from) others and, to a lesser extent, religious practices and spiritual attitudes. These ideas informed the development of the VRS below.

2.3.2 Validation of the Vietnamese Mental Health Recovery Scale (VRS)

2.3.2.1 Participants

Forty-eight service users (28 male) from the Vietnamese Mental Health Services were recruited. The mean age of this sample was 49.15 years of age ($SD = 11.21$).

Table 1 describes the sociodemographic features of this sample.

<table>
<thead>
<tr>
<th>Second language</th>
<th>$N$ (%)</th>
<th>Marital status</th>
<th>$N$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>15 (31.30)</td>
<td>Single</td>
<td>25 (52.10)</td>
</tr>
<tr>
<td>Cantonese</td>
<td>5 (10.40)</td>
<td>Divorced/widowed</td>
<td>10 (20.80)</td>
</tr>
<tr>
<td>Not specified</td>
<td>28 (58.40)</td>
<td>Married/partnered</td>
<td>13 (27.10)</td>
</tr>
<tr>
<td>Known to the VMHS</td>
<td></td>
<td>Employment status</td>
<td></td>
</tr>
<tr>
<td>&lt; 2 years</td>
<td>5 (10.40)</td>
<td>Employed/self-employed</td>
<td>1 (2.10)</td>
</tr>
<tr>
<td>2 to 5 years</td>
<td>11 (22.90)</td>
<td>Home-maker</td>
<td>4 (8.30)</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>12 (25.00)</td>
<td>Unemployed</td>
<td>41 (85.40)</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>20 (41.70)</td>
<td>Student</td>
<td>2 (4.20)</td>
</tr>
<tr>
<td>Residence in the UK</td>
<td></td>
<td>Living situation</td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>3 (6.30)</td>
<td>Private home</td>
<td>15 (31.25)</td>
</tr>
<tr>
<td>5 to 10 years</td>
<td>5 (10.40)</td>
<td>Family home</td>
<td>24 (50.00)</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>40 (83.30)</td>
<td>Support residence</td>
<td>9 (18.75)</td>
</tr>
</tbody>
</table>

Note. VMHS = Vietnamese Mental Health Service
2.3.2.2 Scale development procedure

The development of the VRS was completed following the guidelines for content validity provided by Haynes, Richard, and Kubany (1995). Content domains from two existing recovery questionnaires were first identified: The Recovery Elements Assessment Questionnaire–Patient Version (REAQ-PV) scale was selected because it was previously validated in a Chinese sample (Siu et al., 2012); and the Illness Management and Recovery Scale (IMR) was selected because of its extensive use in the English-language research literature (Hasson-Ohayon, Roe, & Kravetz, 2008). Interview codes obtained from the focus groups were mapped onto these content domains. All interview codes broadly fit existing domains (see Appendix 4).

Existing items from the REAQ-PV and IMR were then selected and modified based on its compatibility with the focus group information collected. This resulted in the development of 20 items for the VRS. Where the 20 VRS items still did not capture the ideas contained in focus group codes, new items were generated. This resulted in the development of a further nine items (29 in all).

The content domains of all 29 items can be qualitatively classified into items measuring meaningful social roles and interactions, self-management of problems, and spiritual attitudes and living (see Table 2). Critically, the selection and wording of these 29 items were discussed with the staff of the VMHS, and the supervisory team, which often led to further modifications of these items.

To formally assess the clarity and usefulness of these 29 questionnaire items, an expert panel of seven mental health professionals familiar with East-Asian culture were consulted: one psychiatrist (JS), five clinical psychologists (OM, AB, LY, AP, and JJ), and one support worker (TH). These consultants separately rated the clarity
and usefulness of each questionnaire item on a 7-point Likert scale (1 = strongly disagree | 2 = moderately disagree | 3 = mildly disagree | 4 = neither agree nor disagree | 5 = mildly agree | 6 = moderately agree | 7 = strongly agree). Based on the descriptive statistics of these assessments and extended conversations with the panel, items that had poor clarity were reworded and items with the highest usefulness ratings from each content domain were selected for the validation study (mean scores > 5.83). The mean expert ratings for each item is found in the last column of Table 2 and the final 25 items selected for validation are marked with an ‘*’.

The 25-item questionnaire was translated into Vietnamese and back translated by JS and TH to confirm the accuracy of the translation. Any disagreements in translation were resolved by consensus. Unlike the IMR and REAQ-PV scales, the 25-item questionnaire had a reference period of the four weeks prior to the assessment, and used a 3-point Likert scale for simplicity (0 = no | 1 = maybe | 2 = yes). A recovery score for each service user was computed by summing up their responses on all items.

2.3.3 Measures

2.3.3.1 Mental Health

Phan Vietnamese Psychiatric Scale (PVPS; Phan, Steel, & Silove, 2004). This is a 53-item questionnaire used to measure aspects of mental health over the previous four weeks. It was developed using Vietnamese idioms associated with psychiatric symptoms and includes subscales of anxiety (13-items), somatisation (14-items), affect-depression (15-items), and vegetative-depression (11-items). Each item is rated on a 3-point scale (0 = never | 1 = occasionally | 2 = frequently). The subscale
vegetative-depression was not used here due to its conceptual overlap with the subscale affect-depression. Total scores for each subscale were used in the analysis. The subscales for affect-depression ($\alpha = .95$), anxiety ($\alpha = .93$), and somatic symptoms ($\alpha = .91$) demonstrated good internal consistency in this sample.

2.3.3.2 Wellbeing

Affect Balance Scale (ABS; Bradburn, 1969). This 10-item questionnaire assessed quality of life with a focus on internal positive and negative affective states. Each item is rated on a 2-point scale (0 = no | 1 = yes). The factor structure of this scale includes subscales of positive affect and negative affect and has been validated in a Vietnamese sample (Devins, Beiser, Dion, Pelletier, & Edwards, 1997). One item on this scale – ‘feeling on top of the world’ – was removed because it did not translate into Vietnamese easily. Items for negative affect were reverse coded and the total scores were used in the analysis. The 9-item scale showed good internal consistency in this sample ($\alpha = .87$).
### Table 2 Questionnaire items of the 29-item Vietnamese Mental Health Recovery Scale (VRS) and expert panel ratings of their usefulness

<table>
<thead>
<tr>
<th>Content domain and modified test item</th>
<th>Source</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meaningful social roles and interactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1* I feel able to interact with Vietnamese people apart from my family</td>
<td>IMR/FG</td>
<td>6.83 (0.41)</td>
</tr>
<tr>
<td>2* My problems have stopped me from finding volunteer work or a job that is meaningful to me (R)</td>
<td>IMR/FG</td>
<td>6.83 (0.41)</td>
</tr>
<tr>
<td>3* I feel lonely and isolated (R)</td>
<td>FG</td>
<td>6.83 (0.41)</td>
</tr>
<tr>
<td>4* I am able to leave the house and participate in meaningful activities like cooking, playing chess, meeting people, etc.</td>
<td>REAQ/IMR</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>5* I hide my problems from others because I am scared people will gossip (R)</td>
<td>FG</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>6* I suffer from extreme prejudice as a Vietnamese person (R)</td>
<td>REAQ</td>
<td>6.50 (0.55)</td>
</tr>
<tr>
<td>7* I have someone who cares for me at home when I am unwell</td>
<td>REAQ/FG</td>
<td>6.50 (0.55)</td>
</tr>
<tr>
<td>8* My family do not allow me to make my own choices (R)</td>
<td>IMR/FG</td>
<td>6.50 (0.84)</td>
</tr>
<tr>
<td>9* I am able to be a good husband, father, son, brother, or friend OR I am able to be a good wife, mother, daughter, sister, or friend</td>
<td>REAQ/IMR/FG</td>
<td>6.50 (0.55)</td>
</tr>
<tr>
<td>10* I am better at coping with pressure from my family and friends</td>
<td>FG</td>
<td>6.50 (0.84)</td>
</tr>
<tr>
<td>11* I have self-respect</td>
<td>REAQ/FG</td>
<td>6.33 (0.82)</td>
</tr>
<tr>
<td>12* Some of my family and friends do not take my opinions seriously (R)</td>
<td>FG</td>
<td>6.17 (1.60)</td>
</tr>
<tr>
<td>13 I feel able to interact with people outside the Vietnamese community</td>
<td>IMR</td>
<td>6.17 (0.75)</td>
</tr>
<tr>
<td>14 I have role models to learn from</td>
<td>REAQ</td>
<td>6.00 (1.10)</td>
</tr>
<tr>
<td>15 I sometimes get jealous of others that have a better life (R)</td>
<td>FG</td>
<td>5.50 (1.05)</td>
</tr>
</tbody>
</table>
Table 2 continued

<table>
<thead>
<tr>
<th>Content domain and adapted test item</th>
<th>Source</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-management of problems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16* I am able to understand and use simple English to talk to my family and ‘outsiders’</td>
<td>FG</td>
<td>6.80 (0.45)</td>
</tr>
<tr>
<td>17* I feel ‘fed-up and tired of living’ (i.e., ‘chán đổi’) (R)</td>
<td>IMR/FG</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>18* I know some ways to prevent getting unwell again</td>
<td>REAQ/IMR</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>19* I know how to get the correct help quickly when I have a crisis</td>
<td>REAQ</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>20* I am able to find good ways to relax and cope with my problems</td>
<td>REAQ/IMR</td>
<td>6.50 (0.84)</td>
</tr>
<tr>
<td>21* I am in better control of my lifestyle habits (e.g., drug taking, drinking, smoking and gambling)</td>
<td>IMR/FG</td>
<td>6.50 (0.84)</td>
</tr>
<tr>
<td>22 I have learnt to focus on my strengths instead of my weaknesses</td>
<td>REAQ</td>
<td>6.40 (0.89)</td>
</tr>
</tbody>
</table>
**Table 2 continued**

<table>
<thead>
<tr>
<th>Content domain and adapted test item</th>
<th>Source</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spiritual attitudes and living</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23* I feel my life has meaning and purpose</td>
<td>REAQ</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>24* I have hope for the future and this helps me face my current difficulties</td>
<td>REAQ</td>
<td>6.67 (0.52)</td>
</tr>
<tr>
<td>25* I accept that I need help to get better</td>
<td>REAQ</td>
<td>6.50 (0.84)</td>
</tr>
<tr>
<td>26* There are opportunities for me to find peace of mind by praying, chanting, or giving offerings if I want to</td>
<td>FG</td>
<td>6.33 (0.82)</td>
</tr>
<tr>
<td>27* My problems have taught me to be contented and enjoy the simple things in life</td>
<td>REAQ</td>
<td>6.20 (1.30)</td>
</tr>
<tr>
<td>28* I am able to accept my relationship status (e.g., being single or married)</td>
<td>FG</td>
<td>5.83 (1.17)</td>
</tr>
<tr>
<td>29* I am able to do good work</td>
<td>FG</td>
<td>5.50 (0.55)</td>
</tr>
</tbody>
</table>

*Twenty-five items selected for validation in a test sample

Note. (R) = reverse coded; Rating = mean score of how useful an item is to Vietnamese recovery; REAQ = Recovery Elements Assessment Questionnaire–Patient Version scale (Siu et al., 2012); IMR = Illness Management and Recovery Scale (Hasson-Ohayon et al., 2008); FG = focus groups
Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). This 5-item questionnaire of general contentment with life was rated on a 7-point Likert scale (1 = strongly disagree | 2 = moderately disagree | 3 = slightly disagree | 4 = neither agree nor disagree | 5 = slightly agree | 6 = moderately agree | 7 = strongly agree). This scale has been validated in a sample of Vietnamese patients with musculoskeletal impairments (Takahashi et al., 2011). In the present study, one questionnaire item showed low item-total correlation, \( r = .27 \). Ratings on this item (i.e., ‘if I could live the last four weeks over again, I would change almost nothing’) were therefore not added to the total life satisfaction scores. This 4-item scale demonstrated good internal consistency here (\( \alpha = .94 \)).

2.3.3.3 Life functioning

General Assessment of Functioning scale (GAF; American Psychiatric Association, 2000). This 1-item scale was completed by service users’ keyworkers, providing an overall score for the vocational, psychological, and social functioning of service users over the previous four weeks. The single item was rated on a scale ranging from 0 to 100 with descriptive anchors at every 10-point mark. To account for individual differences between support-worker ratings, the scores were statistically centred for each professional completing the assessment before it was used in the analysis.

Disability Living Allowance Scale (reversed scored). Service users’ level of disability allowance was determined by a previous assessment done by the local authority. This was a thorough assessment of service users’ personal care needs due to physical and mental health difficulties and is used here as an indicator of general functioning. Service users either did not receive disability allowance or they received
some level of financial support that the local authority defined as low, medium, or high (0 = high | 1 = medium | 2 = low | 3 = no allowance).

2.3.4 Analysis

The IBM Statistical Package for the Social Sciences (SPSS) was used to analyse the survey data. Reliability of the scale was evaluated using Cronbach’s $\alpha$. Questionnaire items with poor communalities (i.e., item-total correlations < .30) were excluded and the sum of the remaining items was used in the final analysis.

Concurrent and divergent validity of the scale was tested by exploring its association with scores on measures of wellbeing, general functioning, and mental health using Pearson’s bivariate correlation coefficient ($r$).

Finally, an Analyses of Covariance (ANCOVA) was conducted to assess recovery across service users’ marital status (0 = divorced-widowed | 1 = married-partnered | 2 = single). Before sex (0 = female | 1 = male) and age were entered as covariates, independent sample $t$-tests and $\chi^2$-tests were used to explore if sex and age were comparable across groups. This was done because any substantive differences of covariates across groups would suggest that an ANCOVA is inappropriate (see Miller & Chapman, 2001).

2.4 Results

2.4.1 Reliability

The 25-item questionnaire was further reduced by deleting items that had poor communalities (i.e., low item-total correlations). The process was repeated until all items of the questionnaire achieved communalities > .30 as recommended elsewhere (Field, 2009). Ten items were eventually removed and a final 15-item questionnaire
demonstrated good internal consistency ($\alpha = .91$; see Table 3). Five items remained in each content domain of recovery: meaningful social roles and interactions ($\alpha = .74$), self-management of problems ($\alpha = .73$), and spiritual attitudes and living ($\alpha = .82$).

To explore if the removed items measured any latent underlying constructs, their communalities were also tested. Five items that assessed service users’ experience of social discrimination shared strong communalities, $\alpha = .72$ (items 3, 5, 6, 12, and 17 of the 29-item VRS; see Table 2). Total scores on this social discrimination scale only marginally correlated to total recovery scores on the 15-item VRS, $r = .28$, $p = .06$, suggesting that mental health recovery in this population can occur in spite of discrimination.
<table>
<thead>
<tr>
<th>Content domain and test item</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meaningful social roles and interactions</strong></td>
<td></td>
</tr>
<tr>
<td>1. I feel able to interact with other Vietnamese people apart from my family</td>
<td>.55</td>
</tr>
<tr>
<td>2. I am able to leave the house and participate in meaningful activities like cooking, playing chess, meeting people, etc.</td>
<td>.38</td>
</tr>
<tr>
<td>3. I am able to be a good husband, father, son, brother, or friend OR</td>
<td>.70</td>
</tr>
<tr>
<td>I am able to be a good wife, mother, daughter, sister, or friend</td>
<td></td>
</tr>
<tr>
<td>4. I am better at coping with pressure from my family and friends</td>
<td>.70</td>
</tr>
<tr>
<td>5. I have self-respect</td>
<td>.50</td>
</tr>
<tr>
<td><strong>Self-management of problems</strong></td>
<td></td>
</tr>
<tr>
<td>6. I am able to understand and use simple English to talk to my family and ‘outsiders’</td>
<td>.37</td>
</tr>
<tr>
<td>7. I know some ways to prevent getting unwell again</td>
<td>.67</td>
</tr>
<tr>
<td>8. I know how to get the correct help quickly when I have a crisis</td>
<td>.50</td>
</tr>
<tr>
<td>9. I am able to find good ways to relax and cope with my problems</td>
<td>.83</td>
</tr>
<tr>
<td>10. I am in better control of my lifestyle habits</td>
<td>.56</td>
</tr>
<tr>
<td>(e.g., drug taking, drinking, smoking and gambling)</td>
<td></td>
</tr>
<tr>
<td>Content domain and test item</td>
<td>Communalities</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Spiritual attitudes and living</strong></td>
<td></td>
</tr>
<tr>
<td>11 I feel my life has meaning and purpose</td>
<td>.72</td>
</tr>
<tr>
<td>12 I have hope for the future and this helps me to face my current difficulties</td>
<td>.85</td>
</tr>
<tr>
<td>13 There are opportunities for me to find peace of mind by praying, chanting, or giving offerings if I want to</td>
<td>.80</td>
</tr>
<tr>
<td>14 My problems have taught me to be contented and enjoy the simple things in life</td>
<td>.46</td>
</tr>
<tr>
<td>15 I am able to accept my relationship status (e.g., being single or married)</td>
<td>.38</td>
</tr>
</tbody>
</table>
2.4.2 Concurrent and divergent validity

The VRS demonstrated good concurrent validity where higher recovery scores were associated with significantly improved affect states, \( r = .77, p < .001, r^2 = 0.59 \), and life satisfaction, \( r = .72, p < .001, r^2 = 0.52 \). Additionally, endorsements of recovery correlated positively with professional ratings of life functioning, \( r = .41, p < .01, r^2 = 0.17 \), and lower level of disability allowance received from the local authority, \( r = .31, p < .05, r^2 = 0.10 \).

Divergent validity was demonstrated where recovery scores were significantly associated with fewer endorsed symptoms of depression, \( r = -.59, p < .001, r^2 = 0.35 \), and somatisation, \( r = -.41, p < .01, r^2 = 0.17 \), on the PVPS. The results also indicated a marginally negative relationship between recovery scores and symptoms of anxiety, \( r = -.25, p = .09 \). See Table 4 for the correlation matrix of the variables measured.

2.4.3 Service user characteristics

Marital status. Service users who were divorced/widowed were significantly older than service users who reported that they were single or married/partnered (\( p < .05 \)); the latter two groups were not different on the covariates of sex or age (\( p > .05 \)). The analysis was, therefore, conducted without the divorced/widowed group. Controlling for sex and age, the ANCOVA revealed that married/partnered service users (\( M = 25.46, SD = 4.86 \)) reported higher recovery scores compared to service users who self-identified as single (\( M = 18.31, SD = 8.22 \)), \( F(1, 34) = 8.13, p < .01, \eta^2 = 0.19 \).
### Table 4: Correlation matrix of scores of recovery, mental health, subjective wellbeing and life functioning

<table>
<thead>
<tr>
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<th>(1)</th>
<th>(2)</th>
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<th>(4)</th>
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</thead>
<tbody>
<tr>
<td>Recovery</td>
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<td></td>
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<tr>
<td>(1) Total recovery score</td>
<td>1.00</td>
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<td></td>
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<tr>
<td>Mental health</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>(2) PVPS-depression</td>
<td>-.59***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) PVPS-anxiety</td>
<td>-.25*</td>
<td>.57***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) PVPS-somatic</td>
<td>-.41**</td>
<td>.72***</td>
<td>.80***</td>
<td>1.00</td>
<td></td>
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<tr>
<td>Wellbeing</td>
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</tr>
<tr>
<td>(5) Affect</td>
<td>.77***</td>
<td>-.77***</td>
<td>-.41**</td>
<td>-.57***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Life satisfaction</td>
<td>.72***</td>
<td>-.68***</td>
<td>-.23</td>
<td>-.41**</td>
<td>.75***</td>
<td>1.00</td>
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<tr>
<td>Life functioning</td>
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<td></td>
</tr>
<tr>
<td>(7) General functioning</td>
<td>.39**</td>
<td>-.32*</td>
<td>.01</td>
<td>-.09</td>
<td>.32*</td>
<td>.48***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>(8) Disability allowance</td>
<td>.31*</td>
<td>-.22</td>
<td>-.18</td>
<td>-.21</td>
<td>.26+</td>
<td>.12</td>
<td>.34*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .001$; PVPS = Phan Vietnamese Psychiatric Scale (Phan et al., 2004); ABS = Affect Balance Scale (Bradburn, 1969); SWLS = Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985); GAF = General Assessment of Functioning scale (American Psychiatric Association, 2000); Disability allowance (reverse coded) = Disability Living Allowance (reversed) Scale.
2.5 Discussion

The present report validates a Vietnamese Mental Health Recovery Scale (VRS) for future outcome monitoring of community mental health services for Vietnamese refugees. Unlike previous translations of recovery tools (Chiba et al., 2010; M. Y. L. Chiu et al., 2010), the development of the VRS followed a consultative process to improve its cultural and contextual relevance (see Siu et al., 2012 for a similar procedure done amongst Chinese psychiatric patients). The final 15-item scale demonstrated strong internal consistency ($\alpha = .91$) suggesting that the scale measures a coherent psychological construct of recovery in this population.

VRS’s concurrent validity was demonstrated by its positive correlations with self-report general wellbeing and professional ratings of general functioning. Conversely, the scale’s divergent validity was verified by its negative correlations with self-endorsed mental health symptoms. These indicators of construct validity for the VRS are similar to those used in previous validation studies of prominent recovery scales in the English language (Burgess et al., 2011; Campbell-Orde et al., 2005). Critically, the strong relationships between recovery and indices of wellbeing (large effect sizes, $r^2$ range: 0.52 – 0.59), compared to indices of life functioning (small effect sizes, $r^2$ range: 0.10 – 0.17) and mental health problems (small to medium effect sizes, $r^2$ range: 0.06 – 0.35), suggest that recovery amongst Vietnamese refugees is understood in broad terms of wellness in spite of mental ill health and its dysfunction (Anthony, 1993; Deegan, 1996).

One strength of the current study is the use of measures for validity testing that were either developed using culturally-dependent ideas or measures validated using Vietnamese samples; the Phan Vietnamese Psychiatric Scale was developed using
Vietnamese idioms and ideas of psychological distress (Phan et al., 2004); whilst the Affect Balance Scale and the Satisfaction with Life Scale were translated and used in Vietnamese refugee and physical health contexts respectively (Devins et al., 1997; Takahashi et al., 2011).

2.5.1 Recovery amongst Vietnamese refugees

The service users recruited in this study were forced migrants that came to the UK due to war and racial conflicts in Vietnam during the 1970s and 1980s (Vietnamese Mental Health Services, 2001). The recovery themes identified in the VRS are therefore understood with this backdrop of significant personal, social and cultural loss and exclusion (Gold, 1992). Recovery processes of the VRS – meaningful social roles and interactions, self-management of problems, and spiritual attitudes and living – qualitatively overlap with processes of personal recovery identified in the English literature (the CHIME framework; see systematic review by Leamy et al., 2011). The cross-cultural correspondences of these processes, however, do not diminish their particular expression within a Vietnamese refugee context.

Firstly, the VRS conceives meaningful social roles and interactions as recovery through participation in community-based activities (items 1-2); the fulfilment of social responsibilities (i.e., as a father/mother, husband/wife, son/daughter; item 3); the self-respect achieved from role satisfaction (item 5); and the ability to cope with social stigma (items 4).

The endorsement of the VRS item affirming traditional (Confucian) family structures (Tseng, 1973; Yee, 2003b), is consistent with the quantitative finding of higher recovery scores amongst service users in partnered or married relationships, compared to those who were single. This suggests that living consistently with
traditional beliefs promotes subjective wellness in this population. Vietnamese refugees are known to experience strong emotions of guilt and shame when they are unable to fulfil perceived family obligations (Hsiao et al., 2006). Therefore they probably yield greater self-respect when satisfied (VRS item 5), and greater distress when frustrated (VRS items 4).

Not surprisingly, the most challenging aspects of family life reported in the focus groups was the frustration of parents who felt “disrespected” by their children, and the shame of fathers who were unable to “lead” and provide financially for their families. These role reversals amongst refugees are thought to be the consequence of increased social and economic power amongst Vietnamese women and children compared to men and adults (Gold, 1992). Additionally, Vietnamese children acculturated to Western values are known to hold weakly to traditional family values of obedience to parental authority (Nguyen & Williams, 1989), further increasing the possibility of intergenerational tensions (Matsuoka, 1990).

Secondly, the self-management of problems is conceived by the VRS as recovery through improved English language communication (item 6); the prevention or remediation of ill health (items 7-8); and the ability to cope without the excesses of drinking, smoking, gambling and substance use (items 9-10). Recovery through self-management can be understood as coping with the effects of forced migration (Gold, 1992) and redressing poor ways of coping that were used in the past.

This process is similar to models of recovery that emphasise personal participation and self-control in the pursuit of personal goals (Andresen, Oades, & Caputi, 2003; Deegan, 1988; Jacobson & Greenley, 2001; Schauer, Everett, del Vecchio, & Anderson, 2007). However, in the Vietnamese context, personal identities and goals...
are socially defined (Matsuoka, 1990). Private desires and emotions are restrained if they disrupt social harmony or increase risk of social exclusion (reviewed by Markus & Kitayama, 1991). Personal choices that reduce one’s social burden (as measured by VRS items 6-10) can, therefore, be viewed as forms of self-discipline that are performed out of a sense of propriety (li 礼) and respect for others (Analects 12.1; Silingerland, 2005).

*Self-management* could also be conceived as attempts to avoid the social stigma associated with attendance at mental health services (Hsiao et al., 2006; Tabora & Flaskerud, 1997). This is supported by qualitative findings that East-Asian Americans actively avoid professional help-seeking because of the potential loss of reputation (Tabora & Flankerud, 1997). Vietnamese refugees in the UK are also reluctant to share mental health information with anyone outside the family (data from an unpublished service-related research project; Thomas, 2006).

Thirdly, recovery through *spiritual attitudes and living* in the VRS can be understood as the felt sense of having a meaning and purpose to life (item 11); the certainty of hope for the future (item 12); the opportunity to participate in religious activities of prayer, meditative chants, and the giving of offerings (item 13); and the contentment and acceptance of one’s present circumstances (items 14-15).

Qualitative reports from the focus groups confirm the importance of Buddhist ideas of *Karma* and religious practices of prayer to dead relatives. These are important ideas for recovery to the Vietnamese because mental illness is often viewed as a consequence of actions in a previous life or that of one’s ancestors (Vietnamese Mental Health Services, 2009). ‘Peace of mind’ and hope for the future is enabled by religious ritual (VRS item 12-13) because the appeasement of the gods and the
veneration of dead relatives are viewed as means to alter present circumstances (Bhatia & Sethi, 2007; Jellema, 2007; Tan, 1981).

Additionally, attitudes of acceptance and contentment, in spite of problems (items 14-15), are viewed as virtues because all forms of strife and competition are understood to increase frustration and create disharmony and imbalance in Daoist and Buddhist thought (C. Chan et al., 2002; Hoang & Erickson, 1985). Silent endurance of pain and death can be possible because suffering is understood as a transient and fundamental part of the human condition (L. M. Chen et al., 2008; K. S. Yip, 2004). Healthcare professionals working with Vietnamese refugees in London confirm these fatalistic attitudes, reporting that the community understands the deliberate endurance of suffering as a demonstration of strength (Vietnamese Mental Health Services, 2009).

2.5.2 Vietnamese recovery in clinical context

Total scores on questionnaire items measuring social discrimination were found to be marginally associated with recovery scores on the final 15-item VRS. This suggests a distinct quality of recovery in this community: Vietnamese refugees are able to live well, not only with mental ill health (Anthony, 1993), but also with its social consequences of discrimination. In particular this is achieved if service users are supported to develop the VRS content domains of meaningful social roles, a confidence to self-manage personal psychosocial needs, and a vibrant spiritual life.

The recovery processes identified here are to be applied with caution to Vietnamese people outside this immigrant and middle-aged context of this study sample. Traditional family values (Nguyen & Williams, 1989) and spiritual interpretations of health and illness (Amodeo, Robb, Peou, & Tran, 1996) are a part of Vietnamese
culture more broadly; for this reason, the recovery processes of meaningful social roles and a spiritual life would probably be important recovery domains in Vietnam. However, the strong submission to parental authority (Nguyen & Williams, 1989), suggests that the priority and effectiveness of self-management, remains an unanswered empirical question, especially amongst younger service users in Vietnam.

As for clinical implications, a good recovery outcome assessment has the ability to influence the recovery orientation of commissioning bodies, and the clinical services and teams that use it (Burgess et al., 2011). In particular, the VRS can begin to document the effectiveness (and justify the continued funding) of community programmes like those offered by the Vietnamese Mental Health Services, that prioritise indigenous ideas of life quality. Moreover, a thorough understanding of such indigenous recovery processes by community mental health services may help improve their cultural relevance and accessibility to this population that have hitherto been poor (Jenkins, Le, McPhee, Stewart, & Ha, 1996; Uba, 1992).

Collaborations with grassroots community for mental health service development is therefore crucial (Yee, 2003b), and the present research study presents one way in which this can be achieved in terms of outcome monitoring. Such joint working with community organisations follows national policy recommendations for more service-user consultation and recovery-oriented programmes within third-sector organisations in the UK (National Service Framework for Mental Health; Department of Health, 2012).
2.5.3 Limitations and future research

One weakness of the present study is the small test sample size \((n = 48)\) that precluded validation using factor analytical methods. This is an inherent limitation of the small population available for study. Nevertheless, the strong psychometric properties of the current scale and the qualitative methods used in its development suggest that the instrument is reliable (Cronbach’s \(\alpha = .91\)) and has strong content validity amongst Vietnamese refugees in London.

Another valid criticism of the VRS is how it has not been validated using a Vietnamese sample with acute mental health problems. At the time of the study, service users’ scores for depression (<1.80), somatisation (<1.80) and anxiety (<1.46), on the Phan Vietnamese Psychiatric Scale (Phan et al., 2004), did not reach clinical significance. This suggests that the VRS requires further validation before use in a tertiary mental health setting. Yet, for the purposes of third-sector community services such as the Vietnamese Mental Health Services, the VRS offers a rich way of responsibly measuring programme outcomes in the present political climate that highly values evidence-based early interventions (Department of Health, 2011, 2012).

2.5.4 Conclusion

The present study presents the VRS as a reliable and valid measure of recovery amongst the Vietnamese refugee population. Content validity of the measure was enhanced by a consultative process with Vietnamese service users and professionals familiar with the culture; whilst construct validity was demonstrated by its positive relationships with wellbeing and general functioning, and negative relationships with psychiatric symptoms. The VRS measures recovery processes of meaningful social roles and interactions, self-management of problems, and spiritual attitudes and
living. These are mechanisms for rehabilitation that are embedded and best understood within Confucian, Daoist, and Buddhist thought. The scale is well suited to support the audit and development of recovery-oriented, Vietnamese community psychology programmes.
2.6 References


Thomas, L. (2006). Exploring the views of staff at Vietnamese community welfare groups on how their clients experience mainstream mental health services and talking therapies: BME Access Service, Department of Psychology, City & Hackney Centre for Mental Health.


Part 3. The critical appraisal

Discussions of a Chinese-Singaporean clinical psychologist in training
3.1 Methodology in cultural context

In this section, I reflect on the methods used in the systematic review of Chapter 1 and the psychometric study of Chapter 2.

3.1.1 Meta-analyses

In Chapter 1, I reviewed the Psychological Sense of Community (PSC) data in East and Southeast (E/SE) Asia. The motivation for this work was the growing number of available descriptive studies that reported PSC as a predictor, or outcome, in their statistical models (regressions and correlations). My choice of this meta-analytic method, as opposed to a narrative review, was informed by the prospect of identifying moderators of the reported associations (Field, 2003). A more personal reason for this work was the opportunity to develop further statistical skills during my doctoral training.

Although PSC has been a central construct of interest in the community psychology literature (Sarason, 1974), its definition and measurement has been varied due to the diverse settings that it has been applied to (Chavis et al., 1986; Flaherty et al., 2014; D. A. Long & Perkins, 2003). Due to challenges of definition, the dilemma I faced in this project was deciding how broad, or narrow, to define the PSC construct under review. I decided to embrace one prominent theoretical framework and its associated scales (see McMillan & Chavis, 1986), rather than be led by ad hoc PSC scales and definitions provided by individual studies. However, this meant the exclusion of possible content domains for PSC such as neighbouring behaviours, civic and
political participation, place attachment, and community satisfaction (reviewed by D. A. Long & Perkins, 2007). As a result, only a smaller number of studies could be added to the review. Nevertheless, the tight definition of PSC and engagement with McMillan & Chavis’ PSC framework are now strengths of the systematic review.

If more work were to be put into the review, data from studies that recruited Caucasian samples could have been extracted and compared with E/SE Asian studies. Unfortunately, no existing meta-analysis was relevant or available for inclusion. To my knowledge, only one previous review has been published and it investigated the impact of PSC on civic and political participation (Talò, Mannarini, & Rochira, 2014). Comparison with the data from this review was not possible as the E/SE Asian studies under review did not assess such features of community engagement. Though this would have been an interesting extension of the project, I decided not to pursue this line of inquiry as I judged it to have marginal utility. The amount of time required to review that literature would probably have doubled, and might also have detracted from the central aim of the project to identify the predictors, and outcomes, of PSC in E/SE Asia.

In hindsight, one tenable way I could have improved the project would have been to explore collaborations with Chinese, Korean and Japanese researchers. Based on the translated abstracts available on electronic databases, I identified 21 further studies published in foreign languages that could have been added to this review. However, all of them were inaccessible either due to a lack of subscription rights to indigenous East Asian journals, or the absence of language-domain expertise. The limited budget of this project also did not allow me to employ research assistants to do full-text screenings of these papers. Collaborations may have been a cost effective way to include these foreign-language papers. Additionally, it would also have helped me to
establish future research links as a junior academic starting on an academic career in community psychology.

3.1.2 Mixed methods

In Chapter 2, I used qualitative (focus groups and expert panel discussions) and quantitative (self-report surveys and professional ratings of scale relevance) methods to develop a Vietnamese Mental Health Recovery Scale (VRS). Unlike most psychometric studies that only use quantitative methods, I included qualitative aspects in recognition that consultation would help produce an outcome tool that was relevant to all stakeholders of this project (National Service Framework for Mental Health; Department of Health, 2012).

One dilemma I had with the focus group interviews was whether to keep them open-ended, or to include a semi-structured component that was ordered around a prominent theoretical framework (e.g., CHIME; Leamy et al., 2011). I argued in Chapter 2 that leaving discussions open-ended facilitated conversations that were more respondent-led. The disadvantage of this approach, however, was the inability to engage with the CHIME theoretical framework in any meaningful way other than a cursory mention in my discussion. In hindsight I think that a more thorough use of theory is useful especially for cross-cultural research into recovery – foremost, it provides a ‘common sense’ to discuss differences in results; additionally, it allows for culturally-particular expressions of recovery processes to be described in the context of more general observations found across cultures.

Another possible benefit of using theory in focus groups is the prevention of dominant problem-focused narratives from obscuring strength- and resource-focused discussions. For example, the themes of mental health stigma used a
substantial portion of the focus group interviews though many of these themes did not cohere with the recovery construct that was determined by psychometric methods in the quantitative section of the survey.

Other than the inclusion of guiding theory, I would have considered additional collaborations if given the opportunity to conduct the study again. The many Vietnamese social organisations in London, not associated with the health sector, may have helped with the validation of the VRS by providing a larger pool of healthy participants to identify the factor structure of the scale.

Another aspect of the project I would have done differently is the way I conducted focus group interviews. The males in the groups were relatively silent compared to their female counterparts, and though efforts were made to manage group dynamics by directing attention to those who had spoken little, this proved to be of limited effectiveness. On reflection, the reticence of the men in the group might have occurred due to shame that I might have triggered in our conversations. There could have been a perceived power inversion (Gold, 1992) because I was a young ethnically Chinese professional interviewing older Chinese-Vietnamese men who were unemployed; moreover, I was speaking to them in English through an interpreter, and recording (audio) the session.

This power inversion could have been addressed earlier in the interview by emphasising the expertise they brought to the group, and possibly, by bringing their meaning of the interview processes into the conversation. Furthermore, splitting the focus groups by gender could have given more silent spaces for the men to enter the conversation.
The theoretical assumptions and ethical motivations of the above two projects are discussed next.
3.2 **Theory in cultural context**

Cultural psychology and community psychology were the two overlapping disciplines that informed the planning, conduct and interpretation of my results in this thesis.

### 3.2.1 Cultural psychology

Culture was used, not merely as a moderating factor, nor a context to validate existing psychological ideas (reviewed by Gergen et al., 1996), but rather, as the fertile soil in which these psychological ideas are rooted and derive their meaning. From this point of view, a *Psychological Sense of Community* and *Mental Health Recovery* are understood as historically bounded constructs in Western European and North American academic traditions.

This understanding motivated my efforts to ensure the results of my systematic review acknowledged the E/SE Asian context in which the research participants were taken from. Additionally, multicultural research motivated the development of the indigenous Vietnamese recovery scale. This empirical study deliberately invited indigenous experiences and perspectives (Townley et al., 2011) throughout the research process. As a result, I believe culture-bound conceptions of individual and corporate wellness (Schueller, 2009) were incorporated into the VRS through the Vietnamese voices that were invited to the academic high table. This inclusion of service users, and the grassroots organisation that represented their interests, is an example of how traditional power differences could be acknowledged; in this case,
the power distance between a dislocated Vietnamese refugee community and the health professionals of a host country.

3.2.2 Community psychology

To me, community psychology is the application of cultural psychology in the domain of health and wellbeing. The approach takes a social ecological perspective to mental health and wellbeing, focussing research and practice on the resources within the community, such as sense of community and empowerment, for early intervention (Sarason, 1974; Sasao & Yasuda, 2007).

This is a field that I hope to engage with more in the coming years. My systematic review was an attempt to bring an Asian research agenda into focus. This would be in line with trends in Asia over the last two decades, where research interest in community psychology has grown (the Indian Journal of Community Psychology and the Japanese Journal of Community Psychology published their first issues in 2014 and 1997 respectively).

However, I am not aware of any study that has attempted to modify McMillan and Chavis’s (1986) PSC framework from an Asian perspective. One of my future research interests is, thus, the study of indigenous conceptions of PSC amongst Singaporeans who live in a diverse and highly urban city state. I would like to explore how socially-organised affections, and stories about identity and role, can both protect and maintain emotion dysregulation, reflective dysfunction, and behavioural avoidance. These poor psychological outcomes are what I have come to believe (through anecdotal evidence of my own clinical practice) are the core psychological mechanisms that mediate mental health and wellbeing.

Contextualising these therapeutic targets, with respect to the strong collectivism,
uncertainty avoidance and power distance of E/SE Asian communities (Hofstede, 1987), would be an interesting and useful area of inquiry for both theory and service development.

Another way of promoting PSC research in E/SE Asian is a more deliberate attempt to engage with ideas of social capital in the social science literature (reviewed by Szreter & Woolcock, 2004) and the concept of character strength in the positive psychology literature (Park, Peterson, & Seligman, 2004). Integrating these parallel but seldom intersecting ideas from separate disciplines is useful because of the interpenetration of concepts: the social capital frame, for example, brings into focus interpersonal relationships with similar (‘bonding capital’), different (‘bridging capital’) and powerful (‘linking capital’) others in the community (Putnam, 1995). These are distinctions that will expand PSC theory. The character strength frame, on the other hand, reminds PSC researchers that individual wellbeing is more than the experience of positive emotions. It is also about personal virtue (Schueller, 2009), i.e., the satisfaction and fulfilment of role and social functioning. These aspects of wellbeing have obvious currency for E/SE Asians.

Finally, more than expanding our collective knowledge base, engagement with the ideas of social capital has the added pragmatic value of attracting the interest of politicians, economists, and public health researchers in the promotion of system-level change (Szreter & Woolcock, 2004). In the next section, I discuss this ethical aim in the context of clinical psychology practice in Singapore.
3.3 **Ethics in cultural context**

My approach to scientific inquiry has always had ethical considerations, not only in its design and conduct, but also, in its distribution and contribution to clinical practice.

### 3.3.1 Celebrating community

One ethical consideration for this research was the promotion of individual and community wellbeing, specifically through the exploration of resources within communities (Kramer, Seedat, Lazarus, & Suffla, 2011).

To an extent, this was achieved where PSC was found to correlate with subjective wellbeing. Unfortunately, none of the reviewed studies explored civic engagement (Putnam, 1995). This probably reflects the passive attitudes towards political and civic engagement in the Chinese, Korean and Japanese communities involved in these studies (S. T. Cheng & Mak, 2007; Wilding, 1997). An explanation for this passivity is the central role that extended kinship networks have for welfare and social provision (Hsu, 1971); immediate kinship communities satisfy the emotional and practical needs of its members, minimising the sense of responsibility one has towards others outside these networks.

Since E/SE societies appear to be stratified into distinct concentric circles, my future research interest is the exploration of how relational networks (e.g., kinship, religious and friendships groups), contribute to civic participation in addition to health and wellbeing.
This research interest will be particularly relevant when I return to Singapore. Both the role of clinical psychology in the country’s health system and the involvement of third-sector organisations in community-based care are expanding. The health system in Singapore currently has a strong psychiatric foundation due to the focus on medical services early on in its development. However, in the last decade, greater attention has been given to the professional development of the clinical psychology profession through the regulation of its practice and its professional associations (Republic of Singapore, 2011). Critically, representatives from the ministries of health, social care and education have come together and formulated a National Mental Health Blueprint that commended the principles of good research, recovery, early intervention and community-based care as a focus for national development (Republic of Singapore, 2007).

In this climate of expansion and growth (as opposed to the current austerity in the UK), there are exciting prospects for my research and practice when I return this year (2016). My recent appointment as a researcher and clinical tutor at the National University of Singapore has made this prospect a tangible reality.

### 3.3.2 Celebrating diversity

Another ethical consideration for the design and conduct of this thesis was the principle of inclusion. Without a doubt, inclusion is an important principle in academic research. This is the reason why Chapter 2 welcomed the stories of ‘the alienated and the stigmatised’ Vietnamese people (Sonn et al., 1999, p. 209). Such a focus on inclusion is particularly relevant in E/SE Asia where cosmopolitan living will likely become the norm in most urban centres (K. W. Chan & Zhang, 1999; Yamanaka & Piper, 2005).
I initially struggled with the language used by community psychologists because the language of ‘liberation’ and ‘empowerment’ always unsettled me. These terms have, somewhat, militant and strident associations in my minds, and tended to imply social and political discord. Conversely, ideas of ‘social justice’, ‘community’, ‘inclusion’ and ‘compassion’ fit well with my values for social harmony that I bring from my Confucian and Daoist roots (Hoang & Erickson, 1985; Tseng, 1973; Yee, 2003b; K. S. Yip, 2004).

I have yet to resolve these tensions in my own mind, but the intellectual resource I draw on at such moments is the East Asian Daoist wisdom of balance and synthesis. Reminiscent of Hegelian dialectics, the tensions of contradictory positions are welcomed as having rich potential to establish a higher-level synthesis (Townley et al., 2011) – an idea that is illustrated by the Daoist symbol at the bottom of the page.

Perhaps this aversion to words like liberation and empowerment disqualifies me as a full member of the community psychology fraternity – but perhaps, my incompatible East Asian sensitivities provide the very productive tensions needed to help community psychology on its journey to the East.
3.4 References


Appendices

**Appendix 1**: United Nations list of countries and search terms for the review (United Nations, 2016)

Countries -

*Eastern Asia*: China, Hong Kong Special Administrative Region (SAR), Macao, Korea, Japan, and Mongolia.

*South-Eastern Asia*: Brunei Darussalam, Cambodia, Indonesia, People's Democratic Republic of Lao, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Vietnam.
Appendix 2: Categorising correlates for the review

Predictors and outcome variables of the selected 20 studies were grouped by their content domains. Thirteen constructs were identified at this initial stage: sex, age, education level, socioeconomic status, physical health condition, mental health condition, life quality/satisfaction, social support, relationship quality, social participation, acculturation, neighbourhood (physical/organisational) conditions, and adverse life circumstances.

In consultation with the supervisory team, it was decided that we would exclude the demographic correlates in this review as most of the studies did not consistently provide statistics for these variables. The remainder of the variables were only included if they could be categories along three aspects: subjective wellbeing, experience of social relationships and experience of community structures. This process of grouping correlates was done qualitatively and disagreements were dealt with by consensus.
Appendix 3: Ethical approval letter for empirical paper

UCL RESEARCH ETHICS COMMITTEE
ACADEMIC SERVICES

Dr Oliver Mason
Research Department of Clinical, Educational and Health Psychology
UCL

2 March 2015

Dear Dr Mason:

Notification of Ethical Approval:
Project ID: 899/001: Validation of a Vietnamese Recovery Scale in a community sample of help-seeking Vietnamese residing in the UK: a mixed methods study

Further to your satisfactory responses to the committee’s comments, I am pleased to confirm in my capacity as Chair of the UCL Research Ethics Committee (REC) that your study has been approved by the UCL REC for the duration of the project i.e. until March 2015.

Approval is subject to the following conditions:

1. You must seek Chair’s approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the ‘Amendment Approval Request Form’.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported:

Reporting Non-Serious Adverse Events
For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Reporting Serious Adverse Events
The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.
With best wishes for the research.

Yours sincerely

Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc:
Matthew Lim, Applicant
Professor John King
Participation information sheet for empirical paper

UNIVERSITY COLLEGE LONDON
DEPARTMENT OF CLINICAL, EDUCATION AND HEALTH PSYCHOLOGY

Researcher Contact Information:
Matthew Lim, Trainee Clinical Psychologist
E-mail: 
TEL: 
Gower Street, London, WC1E 6BT

Information Sheet for participation in a questionnaire research study
(You will be given a copy of this information sheet)

Title of Project:
Validation of a Vietnamese Recovery Scale (VRS) in a community sample of help-seeking Vietnamese residing in the UK: A mixed methods study

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 6600/001. We would like to invite you to participate in this research project (details below):

What is the purpose of the study?
This study is trying to find out what Vietnamese people think recovery from mental health problems is like. If this study is successful, we will be able to develop a questionnaire to measure Vietnamese recovery.

Who can participate?
Anyone who is ethnic Vietnamese.

What will happen if you agree?
You will be invited to complete a few questionnaires about your recovery, mental health, and well-being. Your careworker at the Vietnamese Mental Health Service will then help you complete the demographic and general functioning sections of the questionnaire. This will take less than 45 minutes and you will be compensated £5 for your time. If you agree to participate, you will be asked to sign a consent form.

Would this study benefit me directly and what are the risks of participating?
There are no direct benefit to you for participating. Information from this study will help us to develop healthcare services that will meet the recovery needs of the Vietnamese people. There are no anticipated risks associated with participating in this study.

Would my participation be kept confidential and what happens to the information collected?
Any information about you will be assigned a number, and will not have your name on it, so you cannot be recognised from it. The data collected for the study may be looked at by authorised persons from University College London to check that the study is being carried out correctly. All will have a duty of confidentiality to you as a research participant and nothing that could reveal your identity will be disclosed outside the research site. Any research publications would not identify you individually.

Do I have to take part?
It is up to you to decide whether to take part or not; choosing not to take part will not disadvantage you in any way or change the the support you are getting from the Vietnamese
Mental Health Service. If you do decide to take part you are still free to withdraw at any time and without giving a reason.

**What if I have further questions, or if something goes wrong?**
If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact UCL using the details below for further advice and information:
*Student researchers: Matthew Lim (contact details on the top)*
*Staff researchers: Oliver Mason, [redacted]*
*The Chair, UCL Research Ethics Committee, 2 Taviton Street, London, WC1H 0BT, [redacted]*

Please discuss the information above with others if you wish or ask us if there is anything that is not clear or if you would like more information.

All data will be collected and stored in accordance with the Data Protection Act 1998.

Thank you for reading this information sheet and for considering taking part in this research.
Consent form for empirical paper

UNIVERSITY COLLEGE LONDON
DEPARTMENT OF CLINICAL, EDUCATION AND HEALTH PSYCHOLOGY

Researcher Contact Information:
Matthew Lim, Trainee Clinical Psychologist
E: 
TEL: 
Gower Street, London, WC1E 6BT

Consent form for participation in a questionnaire research study
Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Project:
Validation of a Vietnamese Recovery Scale (VRS) in a community sample of help-seeking Vietnamese residing in the UK: A mixed methods study

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 6600/001. Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement: I ______________

• have read the notes written above and the Information Sheet, and understand what the study involves.
• understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
• consent to the processing of my personal information for the purposes of this research study.
• understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
• agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.
• understand that the information I have submitted will be published as a report. Confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications.
• understand that I am being paid for my assistance in this research and that some of my personal details will be passed to UCL Finance for administration purposes.

Date Signature
**Appendix 4:** Table of focus group codes mapped onto recovery content domains from existing recovery measures

<table>
<thead>
<tr>
<th>Recovery content domains from the REAQ-PV and IMR*</th>
<th>Recovery codes from the focus groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect, help, and empowerment</td>
<td>Relationship stressors as trigger for mental health difficulties</td>
</tr>
<tr>
<td></td>
<td>Disrespect in the context of mental health difficulties</td>
</tr>
<tr>
<td></td>
<td>Children do not respect their parents</td>
</tr>
<tr>
<td></td>
<td>Loneliness and feeling uncared for</td>
</tr>
<tr>
<td></td>
<td>Jealousy and gossip within the Vietnamese community (i.e., disrespect)</td>
</tr>
<tr>
<td>Identity and role</td>
<td>High view of family</td>
</tr>
<tr>
<td></td>
<td>Shame of mental health difficulties</td>
</tr>
<tr>
<td></td>
<td>Shame of being single</td>
</tr>
<tr>
<td></td>
<td>Inability to fulfil the male role in the family</td>
</tr>
<tr>
<td>Social interaction</td>
<td>High view of community living</td>
</tr>
<tr>
<td></td>
<td>VMHS as a place to interact with those experiencing the same issues</td>
</tr>
<tr>
<td></td>
<td>Isolation from other Vietnamese</td>
</tr>
<tr>
<td></td>
<td>Isolation because of “closed doors” in the UK</td>
</tr>
<tr>
<td>Meaningful activities</td>
<td>Stresses of unemployment</td>
</tr>
<tr>
<td>Coping and self-management</td>
<td>Gambling and substance use that provides short-term relief</td>
</tr>
<tr>
<td>Resources and strengths</td>
<td>Language barriers to social life (lacking English language resources)</td>
</tr>
<tr>
<td>Spirituality and hope</td>
<td>Traditional spiritual beliefs</td>
</tr>
</tbody>
</table>

*REAQ-PV = Recovery Elements Assessment Questionnaire – Patient Version; IMR = Illness Management and Recovery Scale.*