

## **Relationship among psychological well-being, coping, resilience and depression of older adults: An exploratory study**

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### ***Abstract***

*This study aimed to investigate the relationship among psychological well-being, coping, resilience and depression of older adults in Singapore. A cross-sectional study was conducted in a community centre with a convenience sample of 199 older adults. Face-to-face structured interview was used to collect data. Measures included General Coping Subscale, Connor-Davidson Scale, WHO-5 Well-Being Index, Geriatric Depression Scale and socio-demographic data. The findings suggested that participants generally reported high level of coping, resilience, and well-being. Higher level of coping and resilience were related to higher psychological well-being and lower risk for depression. Higher level of coping was related to higher resilience. Caregiver responsibility was a significant factor influencing resilience. This study suggested building coping and resilience in older adults as strategies to enhance their psychological well-being and reduce the risk of depression. This approach will shift from focusing on the fragility, ill health and problems faced by older adults to a model of working with their strengths and areas of enduring ability.*

*Keywords: psychological well-being, coping, resilience*

### **Introduction**

As life expectancy increases and fertility decreases in many Asian countries, it was expected that the majority of the world's older people would be living in Asia in the

21st century (Chan, 2010). Singapore has become the world's third fastest ageing nation. With the post-war baby boomers entering the ageing population, residents age 65 and above are expected to increase from 352,600 in 2011 to 800,000 in 2030

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(Singapore Department of Statistics, 2013). Accelerated efforts are needed to prepare for the growing needs of the ageing population. Older adults might face many ageing-related stressors such as biological, social and economic challenges that could impede their abilities to care for themselves. This would have adverse effects on their self-worth and well-being and consequently increase the risk of psychological distress (Jung, Muntaner & Choi, 2010). Despite these ageing-related stressors, evidence suggested that many older adults are able to cope and maintain their psychological well-being (PWB). With growing emphasis on positive ageing, PWB has increasingly been regarded as an important outcome in ageing (Ben-Zur, 2002; Ouwehand, Ridder & Bensing, 2007).

PWB generally consists of two aspects - positive mental health, and negative affect or usually labelled as mental ill-health (McDowell, 2010). PWB could be associated with various factors such as social support, living arrangements, social class, physical health, coping, self-esteem, self-efficacy, resilience and mastery (Chokkanathan, 2009).

In Singapore, one in 20 older adults suffered from depression which is more than double the prevalence for individuals in their 30s. While several studies from Singapore have examined factors associated with depression such as living arrangements and social supports (Chan, Malhotra, Malhotra & Ostbye, 2011; Lim & Kua, 2011; Schwingel, Niti, Tang & Ng, 2009), little is known about protective factors of PWB among older adults. There is growing evidence suggesting coping and resilience are two concepts related to individuals' internal resources that have an impact on PWB (Ben-zur, 2002).

Coping refers to the behaviours and thoughts used to manage the internal and external demands of situations being appraised as stressful (Folkman & Moskowitz, 2004).

Lazarus and Folkman's (1984) broadly categorised coping strategies as problem-focused coping, emotion- focused coping and meaning-based coping. Resilience is defined as an individual's flexibility and adaptive capacity that can be activated to maintain well-being (Nygren, et al., 2005).

Literature highlighted that coping and resilience could be important factors for older adults to deal effectively with related changes, losses and disappointment but these factors have not been widely studied. We need to focus on positive aspects in promoting successful ageing such as enhancing coping and resilience rather than deficits and risk factors (Alfieri & Borgogni, 2010). At present, there is a paucity of studies in older adults conducted in Singapore or the Asian region adopting such positive perspectives. This paper reports a study which was conducted in Singapore on older adults' PWB, coping, resilience, and depression.

### **Aim and objectives**

This study aimed to investigate the relationship among PWB, coping, resilience and depression of older adults. The objectives of this study were to:

- describe the PWB, coping patterns, resilience and depression of community-living older adults;
- examine the relationships among PWB, coping patterns, resilience and depression; and
- investigate the relationships between older adult's socio-demographic data, PWB, coping, resilience and depression.

### **Methods**

This was a cross-sectional descriptive correlational study conducted at a community service centre in Singapore. The centre is a voluntary welfare organisation providing counselling services, activities and support

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for promoting PWB of older adults. It serves an estimated population of 31,200 comprising 71.8 % Chinese, 5.1% Malays, 20.8% Indians and 2.3% other races thus allowing a heterogeneous sample to be recruited (National Library of Singapore, 2012).

Data was collected through a face-to-face structured interview. This method took into account the limitations of some older adults with poor vision, poor literacy and reading difficulties. The interviews were conducted by a multi-ethnic and multi-language team in the language that the participants understood to overcome language barriers.

### **Participants**

A convenience sample of community-dwelling older adults was recruited in this study. 'Community-dwelling' in this study referred to non-institutionalised individuals, and those who were not living in the nursing homes or hospitals at the point when the study was conducted.

The participants were recruited from a neighbourhood health screening at the study venue. Older adults from both the centre and members of the public were invited to participate in a health screening programme. Those who attended the health screening programme and met the inclusion criteria were referred to the research team.

Older adults of all races were recruited in this study to allow greater heterogeneity. The older generation Chinese normally speak dialects such as Hokkien, Cantonese, Teochew and Hainanese. Individuals who spoke all these dialects were included in this study. The minimum age of inclusion was set at 50 in this study to allow comparison amongst various age groups.

All the participants recruited met the following inclusion criteria: 1) age 50 years or above; 2) Singaporeans or permanent residents

of Singapore residing in the community; 3) able to understand and communicate in at least one of the languages (English, Malay, Mandarin or dialects); 4) coherent and cognitively sound. The exclusion criteria were those unable to comprehend the interview questions or unable to communicate with the interviewer, and those with a history of cognitive impairment.

The sample size of this study was calculated based on power analysis and past studies (e.g. Chan, Chiu, Chien, Goggins, Thompson, & Hong, 2009). A moderate effect size of 0.41 was expected. A sample size of 190 would be sufficient to achieve 80% power at 0.05 significance level at two-sided test.

### **Measures**

Questionnaires used for this study were available in English, Chinese and Malay. The interviews were conducted by interviewers who were proficient in the dialect or in the presence of volunteer professional translators.

#### **General Coping Scale**

The 9-item General Coping Scale (GCS) was used to measure coping of individuals. It is a reliable and valid culturally relevant instrument (Vaingankar et al, 2011). The scale measured general coping which has a mixture of active coping and avoidance coping. The items were rated on a 6-point Likert scale with '1' representing 'not at all like me' and 6 representing 'exactly like me'. The total scores were obtained by adding the chosen response options. The total potential scores ranged from 9-54. Higher scores indicated greater perceived coping. The Cronbach alpha of the GCS in the present study was 0.855 indicating sufficient internal reliability.

#### **Connor-Davidson Resilience Scale**

The 10-item Connor-Davidson Resilience Scale (CD-RISC) is a uni-dimensional measure

of resilience (Campbell-Sills & Stein, 2007). It measures personal qualities necessary for an individual to survive in the face of adversity. Each item is rated on a 5-point scale from 1 ('not true at all') to 5 ('true nearly all the time'), with the total scores ranged from 10-50. Higher scores indicated higher resilience capacity. The CD-RISC is a well-validated and reliable scale in Asian populations. It showed good psychometric properties to measure resilience in the non-institutionalised older population. The Chinese version of the CD-RISC demonstrated good internal consistency (Cronbach alpha=0.91) and test-retest reliability ( $r=0.90$  for a two-week interval) (Wang, Zhanbiao, Zhang & Zhang, 2010). In the present study, the Cronbach alpha was 0.873 indicating sufficient internal reliability.

### **World Health Organisation-5 Well-Being Index**

The 5-item World Health Organisation Well-Being Index (WHO-5) was used to measure PWB. It is a well-validated uni-dimensional assessment of positive well-being, and subjective quality of life (McDowell, 2010). This tool has been found useful for assessing psychological well-being status among older adults (Momtaz, Hamid, Ibrahim, Yahaya & Abdullah, 2012). Each item is rated on a 6-point Likert scale ranged from 0 to 5, measuring the absence rather than the presence of negative mood. This WHO-5 demonstrated good internal consistency and constructs validity and has been well used in Asian populations (Momtaz et al., 2012; McDowell, 2010). The internal consistency of the scale in the present study was 0.858.

### **Geriatric Depression Scale**

The 15-item Geriatric Depression Scale (GDS) is a widely used scale for detection of depression in older adults. It is the brief version of the 30-item Geriatric Depression Scale and has been adopted for clinical screenings

of old age depression in many countries. Binary scoring is used for item rating whereby participants answered with a 'yes' or 'no' to each item. The total scores ranged from 0 to 15, with the cut-off score of  $\geq 5$  as an indication of risk of depression in Singapore (Nyunt, Fones, Niti, & Ng, 2009). The Chinese version has been validated in Singapore (Schwingel et al., 2009) with the overall good sensitivity (0.97) and specificity (0.95) (Nyunt et al., 2009). The Cronbach alpha of this scale in this study was 0.721 indicating sufficient internal reliability.

### **Socio-Demographic Data**

All participants completed a demographic sheet that included age, gender, race, religion, marital status, living arrangement, caregiving status and availability, education level, employment status, and monthly household income.

### **Data Collection**

Data was collected through face-to-face structured interviews, lasting for about 30-40 minutes, by trained healthcare undergraduate volunteers from the National University of Singapore. The interviewers were allocated to the participants according to their language proficiency. Interviewers proficient in communicating in the dialects: Hokkien, Cantonese, Teochew and Hainanese were assigned to interview dialect-speaking participants. Professional translators were also available during data collection to minimise the problem of language barrier.

Data collection was conducted concurrently with the health screening for older adults in the study venue in September 2012. Older adults who participated in this health screening and met the inclusion criteria were referred to the research team. The researcher explained the purpose of the study, its potential risks/benefits and rights to confidentiality and

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withdrawal to all participants in the language that they comprehend. It was highlighted that their participation in the study was voluntary. Only those with written informed consent were directed to the trained interviewers. These interviews were conducted under the close supervision of the researchers.

Of the 311 older adults approached, 308 fitted into the criteria. Ninety-four refused and 214 agreed to participate in the study. However, 15 participants with valid consent decided to withdraw or refused to continue with few parts of the questionnaire thus they are excluded from this study. Finally, 199 participants completed the study.

### Ethical considerations

Ethical approval was obtained from the National University of Singapore Institutional Review Board and approval was also obtained from the study venue. The purpose of the study, potential risk and benefits, right to confidentiality and withdraw were explained to potential participants. They were informed that their participation was voluntary and whether they participate in the study or not would not affect their chances of receiving health screening. For those who were willing to participate, written consents were obtained.

It was explained to the participants that if their GDS score was  $\geq 5$ , they might be at risk of depression and the researcher would refer them to the Centre in-charge for follow-ups upon their consent. The study found 45 individuals obtained GDS-15 score  $\geq 5$ . Out of the 45, 38 consented to be referred. This was to ensure that participants at risk for depression could receive appropriate help.

### Data analysis

The Statistical Package for Social Science (SPSS) version 20.0 was used to analyse the data. Descriptive statistics such as frequency

and percentage were used to summarise categorical data while mean and standard deviation were used to summarise numerical data. According to the central limit theorem, the data sets were normally distributed owing to the large sample size. T-test and one-way ANOVA were used to determine differences in PWB, coping, resilience and depression between groups of different socio-demographic characteristics. In variables where significant mean differences were observed in three or more groups, post-hoc Bonferroni test was conducted to identify the specific groups with significant differences. Pearson's Product Moment Correlation test was used to examine correlation between variables (total scores of WHO-5, GCS, CR-RISC and GDS). The level of significance was set at  $p < 0.05$  with two-tailed distribution.

### Findings

Table 1 summarises their socio-demographic characteristics. The participants' age ranged from 50 to 87 years old, with a mean of 63.7 (SD= 8.62).

Table 2 presents the summary of ranges and total scores of the five measures used in this study. The WHO-5 scores were above the mean scores of the possible range suggesting the participants had a satisfactory perception on their PWB. The mean GCS and CD-RISC scores were high suggesting many participants reported satisfactory coping and resilience. For the GDS, 45 of them (23%) had a score higher than 5 indicating a risk of depression. Among the 45 participants, 17 (37.8%) of them were men and 28 (62.2%) were women.

Table 3 presents the mean and SD of all GCS items. The three coping strategies that the participants used most were: 'I try to relax'; 'I try to see it in a positive light'; and 'I try to solve the problem one at a time'. The coping strategy that they used least was: 'I try to see the humorous side of the situation'.

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**Table 1**  
Socio Demographic Data (n=199)

	Frequency	Percentage (%)
Gender		
Male	80	40.2
Female	119	59.8
Age (Years)		
50-59	72	36.2
60-69	78	39.2
70-79	39	19.6
>=80	10	5.0
Race		
Chinese	166	83.4
Malay	13	6.5
Indian	20	10.1
Religion		
Buddhism	95	47.7
Christianity	34	17.1
Hinduism	6	3.0
Islam	23	11.6
Others	41	20.6
Marital Status		
Single	15	7.5
Married	150	75.4
Divorced/Separated	9	4.5
Widow/Widower	25	12.6
Education Level		
None	28	14.1
Primary	81	40.7
Secondary	70	35.2
Junior College	9	4.5
University	11	5.5
Employment		
No	106	53.3
Yes	93	46.7
Financial Support		
Work	78	39.2
Family	103	51.8
Aids	3	1.5
Others	15	7.5
Average Household Income (S\$)		
0-1,000	78	39.2
1,001-2,000	42	21.2
2,001-3,000	18	9.0
>3,000	23	11.6
Missing Data	38	19.1
Housing Type		
2-room	18	9
3-room	46	23.1
4-room	92	46.2
5-room	27	13.6
Others	16	8.0
Living arrangements		
Alone	18	9
Family	155	77.9
Friends	2	1.0
Spouse	20	10.1
Others	4	2.0
Caregiver responsibilities		
No	154	77.4
Yes	45	22.6
Caregiver availability		
No	160	80.4
Yes	39	19.6

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**Table 2**  
Summary of all measures (n=199)

Measure+	Possible Range	Actual Range	Mean (SD)
GCS	9-54	9-54	43.91 (7.91)
CD-RISC	10-50	22-50	40.59 (6.26)
WHO-5	0-25	0-25	17.75 (5.47)
GDS	0-15	0-14	2.32 (2.42)

+GCS: General Coping Subscale; CD-RISC: Connor-Davidson Resilience Scale; GDS: Geriatric Depression Scale; WHO-5: World Health Organisation-5 Well- Being

**Table 3**  
Mean scores and standard deviation of items in GCS (n=199)

General Coping Scale	Mean	SD
I try to relax	5.19	1.05
I try to see it in a positive light	5.02	1.15
I try to solve the problem one at a time	5.01	1.22
I try to move on	4.97	1.12
I do something to get my mind off the situation	4.92	1.32
I try not to let it bother me	4.92	1.32
I tell myself that things would get better	4.87	1.32
I try not to take it seriously	4.75	1.39
I try to see the humorous side of the situation	4.35	1.54

Table 4 shows the mean and SD for all items of CD-RISC. The three highest rating items were: ‘I tend to bounce back after illness/hardship’, ‘I can handle unpleasant feelings’ and ‘I think of self as a strong person’. The item with the lowest mean was: ‘I try to see humorous side of problems’.

Table 5 shows the mean (SD) of all the items of WHO-5. ‘I have felt calm and relaxed’ was the highest rating item and ‘my daily life has been filled with things that interest me’ was the lowest rating item.

Table 6 presents the correlations between GCS, CD-RISC, GDS, and WHO-5 total scores. GCS scores had a significant moderate positive correlation with CD-RISC ( $r=0.570$ ), and WHO-5 scores ( $r=0.392$ ) and a significant negative correlation with GDS ( $r=-0.319$ ). CD-RISC had a significant moderate positive correlation with WHO-5 ( $r=0.457$ ) and a negative correlation with GDS ( $r=-0.406$ ). The individuals with higher coping and resilience scores reported psychological well-being scores and lower scores on GDS.

**Table 4**  
Mean scores and standard deviation of items in CD-RISC (n=199)

Connor Davidson-Resilience Scale	Mean	SD
I tend to bounce back after illness/hardship	4.18	0.77
I can handle unpleasant feelings	4.16	0.78
I think of self as strong person	4.15	0.89
I am not easily discouraged by failure	4.14	0.96
I can deal with whatever comes	4.10	0.78
I am able to adapt to change	4.02	0.89
Coping with stress can strengthen me	4.02	1.00
I can achieve goals despite obstacles	3.99	0.91
I can stay focused under pressure	3.98	0.96
I try to see humorous side of problems	3.86	1.07

**Table 5**  
Mean scores and standard deviation of items in WHO-5 Well-Being (n=199)

WHO-5 Scale	Mean	SD
I have felt calm and relaxed	3.79	1.26
I have felt cheerful and in good spirits	3.60	1.33
I have felt active and vigorous	3.47	1.41
I woke up feeling fresh and rested	3.45	1.46
My daily life has been filled with things that interest me	3.45	1.35

**Table 6**  
Correlations between GCS, CD-RISC, SWLS, WHO-5 and GDS (n=199)

Measure+	GCS	CD-RISC	GDS	WHO-5
WHO-5	0.392**	0.457**	-0.519**	–
GDS	-0.319**	-0.406**	–	
CD-RISC	0.570**	–		
GCS	–			

\*\*correlation is significant at the 0.01 level (2-tailed)

+GCS: General Coping Subscale; CD-RISC: Connor-Davidson Resilience Scale;  
GDS: Geriatric Depression Scale; WHO-5: World Health Organisation-5 Well- Being

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There was no significant difference observed in GCS, CD-RISC, WHO-5, and GDS scores among groups of different genders, races, religions, marital status, living arrangements, caregiver availability, education levels, employment status and monthly household income. Caregivers' responsibility was found to be significantly associated with CD-RISC. Those participants who had caregiver responsibility ( $t=-0.474$ ,  $p<0.05$ ) reported higher CD-RISC than those who had no caregiver responsibility.

### Discussion

The study aimed to investigate the relationship among psychological well-being, coping, resilience and depression of community-dwelling older adults. Of the 199 participants recruited in the present study, the majority was Chinese followed by Indian and Malay. The distribution of ethnic groups in the present study was similar to Singapore's general population race composition (Singapore Department of Statistics, 2013), thus representing the population distribution of Singapore.

The majority of participants in this study had an average monthly household income of S\$1,000 (US\$780) that was below the median monthly household income (S\$1,990 [US\$1,486]) of the general population in Singapore (Singapore Department of Statistics, 2013). This might be related to the recruitment of participants from a free health screening programme that attracted less affluent individuals.

The present study had more participants from the younger age counterparts - 50-69 years old. The health screening might have attracted more young old adults perhaps they were more likely to utilise preventive healthcare services. This study also had more female participants than males. Females might be more likely to seek care and use preventive

healthcare services. This finding is supported by the World Health Organisation (2014).

This study used the WHO-5 Well-Being to measure PWB. The findings were consistent with other Singapore study which suggested that older adults in Singapore reported positive PWB (Schwingel et al., 2009). When compared with studies conducted in Western countries such as Sweden, the participants in the present study had comparable or better PWB (Nygren et al, 2005). A possible explanation was that the current participants were recruited from a health screening programme in a service centre. The health screening programme might attract older adults who were active and took proactive steps to take care of their health. They might be a group of older adults who were more positive about themselves.

Older adults in the present study reported high PWB despite the majority of them had low household income. This was consistent with a study conducted in Malaysia which suggested that life satisfaction could be related to acceptance and contentment that was not influenced by income or wealth (Dahlan, Nicol & Maciver, 2010).

This study found older adults reported satisfactory general coping level. Previous studies on community-dwelling older adults in Canada and Thailand also reported similar satisfactory coping abilities. This might suggest that ageing could lead to development of higher wisdom and adaptive coping mechanisms that facilitated older adults to meet the demands of later life (Greenglass, 2006; Maneerat, Isaramalai & Boonyasopun, 2011).

The participants in this study were more inclined to adopt emotional-focused strategies such as relaxation and positive appraisals. Some previous studies, for example, Piboon et al (2012) also found community-dwelling older adults reported higher usage of emotion-

focused coping. Older adults perhaps were less likely to focus on future-oriented goals as they aged and perceived future time to be more limited.

Of interest in this study was both GCS and CD-RISC found that seeing the humorous side of the situation was the least use coping strategy. Literature has discussed the resilience effects of humour on stress and trauma, and humour training could be used to promote coping and growth (Kupier, 2012). However, humour was not a preferred coping method for the participants in this study. It could be related to culture or other reasons. More studies are needed to understand the use of humour in older adults.

Older adults in the present study had high resilience which was consistent with previous findings (Nygren et al., 2005). The high level of resilience in older adults might be related to the various adversities faced in ageing such as bereavement, deteriorating health, financial difficulties and caregiving responsibilities. These life events might result in growth of older people's resilience. The present findings were consistent with Erikson's theory of the life cycle, which stated that the continuing developments of the self across the life span and the ultimate achievement of wisdom in old age provided a basis for the increase in resilience in older adults (Svetina, 2014).

Resilience is an internal resource that developed over time. The participants in this study might also have undergone higher insecurity, poorer standard of living and poorer economic status before Singapore was considered as a developed country. Individuals who survived such hardships were found to have positive efforts of faith, higher willpower and a sense of success to affirm their strengths (Scali et al., 2012). With these strengths, they might be more capable of facing future adversities.

The present study found that higher level of general coping and resilience was positively correlated to higher PWB and negatively correlated with depression. Coping and resilience are learned behaviour that can increase willingness to seek support. Such findings concurred with a study in China which found older adults who had higher resilience had stronger capacities and potentials to deal successfully with challenges, constraints, and adversities (Zeng & Shen, 2010). Older adults with higher resilience might endorse greater optimism towards ageing thus employing positive cognitive appraisal which allowed them to experience higher life satisfaction, and lower level of depression. Additionally, resilience might be a protective factor against adversity thus promoting mental health and PWB (Lau, Morse & Macfarlane, 2012; Stewart & Yuen, 2011).

Participants who had caregiver responsibility in the present study reported higher resilience scores on CD-RISC. Such findings suggested that older adults might benefit from being a caregiver. This is in line with literature that looking after family members provided older adults with a sense of purpose and engagement (Chan, 2010). Although caregiving is associated with emotion, financial and physical stressors, studies found that older caregivers who displayed positive coping mechanisms were more likely to see positive meaning in their caregiving experience. Caregiving could have positive effects on an individual such as perceived gain, satisfaction, or increase in self-esteem derived from caregiving (Chan, 2010). These experiences could be satisfying and rewarding and might improve the PWB of the caregivers.

This present study revealed that 23% of the study participants reported GDS scores above 5 suggesting risk of depression. This percentage was higher when compared with other local studies among older adults

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(e.g. Schwingel, 2009). Such findings were unexpected in this study given the high scores on PWB. A possible explanation for this could be the free health screening might have attracted older adults to seek help. This might also suggest that some older people who had symptoms of depression might not be aware of their symptoms. Some might not want to seek professional help because of the stigma attached to mental health conditions. Some older people might also be more hesitant to share their experiences of depression with others, often ignoring symptoms over long periods of time, and only seeking professional help when things reach crisis point.

This study found higher proportion of women (n=28, 62.2%) than men (n=17, 37.8%) reported a GDS score of more than 5. Although there was no significant difference between genders in the total GDS scores, the higher percentage of women scoring more than 5 could suggest that women were of higher risk of depression. Such findings were consistent with local and regional studies which also suggested women had significantly higher depressive symptoms than men (Chan et al., 2011).

Literature presented reasons on why women displayed higher risk of depression. Older Singaporean women might have weaker social networks outside the household compared to their male counterparts (Chan et al., 2011). This might also be attributed to women traditionally had lower education level and employment when compared to men, thus they were less resourceful. Older women were caregivers and homemakers thus significantly more dependent on their spouse/children for financial and emotional support. If family members were occupied with their own commitments, these older women might feel isolated or neglected. It might also be possible that females tended to be more expressive and admitted that they were unhappy when compared with men thus they were more likely to report depressive symptoms (Chan et al., 2011).

The findings of this study affirmed that value of health screening which include psychological assessment in identifying those who may be at risk of depression. Thus necessary support and referrals could be made. To be effective, interventions that aim to promote PWB have to target needs of different genders.

### ***Limitations of the study***

This was a single centre study. The findings might not be generalised to other community service centres and the entire Singapore population. This study used convenience sampling to recruit participants from a free public health screening programme in a community service centre. This study might exclude older adults who were home-bound, had poor functional abilities or psychological state.

The assessment of constructs was limited to self-report instruments, which may be biased by social desirable response. The present study did not take into consideration of the health status, social support and other factors deemed crucial to affect coping, resilience and PWB.

### ***Implications of the study***

This study contributed to knowledge related to coping, resilience and psychological well-being of community-dwelling older adults. It is crucial for healthcare professionals and policymakers to recognise resilience as a strength that could be encouraged, and further developed in older adults. This approach will shift from focusing on the fragility, ill health and problems faced by older adults to their strengths - coping and resilience. Mental health promotion strategies that build coping and resilience could enhance older adults' inner strengths and their PWB.

Future studies could adopt qualitative design to gain an in-depth understanding of coping, resilience and PWB of older adults. Longitudinal

studies will be useful to know the changes in coping, resilience and PWB as age progresses.

Future studies could employ a larger and heterogeneous sample in examining the influences of socio-demographics data on coping, resilience and PWB. This could guide healthcare professionals to cater for individual need. Intervention to promote resilience could be implemented and evaluated its outcome.

To address the PWB of older adults, researchers could examine other internal and external resources that could impact PWB, such as social support, self-esteem, sense of coherence, mastery and other significant ones to obtain a better understanding in the complex factors influencing PWB.

### Conclusion

This study provided an understanding of coping and resilience and their relationships with PWB among older adults. PWB is an important component of positive ageing. Coping and resilience are protective factors of PWB. Healthcare practitioners could develop interventions that enhance coping and resilience. Such interventions may help older adults in coping ageing-related stressors, promoting their psychological well-being and reducing old age depression.

### 摘要

心理健康、處理力、抗逆力和抑鬱症的關係

本文旨在探討新加坡長者在心理健康、處理力、抗逆力和抑鬱症的關係。在社區中心對199位長者進行橫剖面研究，透過會面及有系統的訪問收集數據。評估方法包括普通處理副量表、Connor-Davidson量表、世界衛生組織五健康指標、老年抑鬱量表及社會與人口數據。結果發現參與研究者普遍達至高水平的處理力、抗逆力及健康。良好的處理力

及抗逆力能導致高水平的心理健康，減低抑鬱症的機會。良好的處理力與高水平的抗逆力息息相關。照顧者的承擔是影響抗逆力的重要因素。本文建議加強長者的處理力和抗逆力，以改善他們的心理健康，減低抑鬱症的危機。此方法由集中於長者的脆弱、疾病及困難轉移到發揮他們的強項及持續能力範疇。

### References

- Alfieri, W. De., & Borgogni, T. (2010). Through the looking glass and what frailty found there: Looking for resilience in older adults. *Journal of American Geriatrics Society*, 56, 602-619.
- Ben-Zur, H. (2002). Coping, affect and aging: the roles of mastery and self-esteem. *Personality and Individual Differences*, 32, 357-372.
- Campbell-Sills, L., & Stein, M. B. (2007). Psychometric Analysis and Refinement of the Connor-Davidson Resilience Scale (CD-RISC): Validation of a 10-item Measure of Resilience. *Journal of Traumatic Stress*, 20(6), 1019-1028.
- Chan, A., Malhotra, C., Malhotra, R., & Ostbye, T. (2011). Living arrangements, social networks and depressive symptoms among older men and women in Singapore. *International Journal of Geriatric Psychiatry*, 26, 630-639.
- Chan, S. (2010). Family caregiving in dementia: The Asian perspective of a global problem. *Dementia and Geriatric Cognitive Disorders*, 30, 469-478.
- Chan, S., Chiu, H. F., Chien, Goggin, W., Thompson, D., & Hong, B. (2009). Predictors of change in health-related quality of life among older people with depression: a longitudinal study. *International Psychogeriatrics*, 21(06), 1171-1179.
- Chokkanathan, S. (2008). Resources, stressors and psychological distress among older adults in Chennai, India. *Social Science & Medicine*, 68, 243-250.

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- Dahlan, A., Nicol, M., & Maciver, D. (2010). Elements of life satisfaction amongst elderly people living in institutions in Malaysia: A mixed methodology approach. *Hong Kong Journal of Occupational Therapy*, DOI: [http://dx.doi.org/10.1016/S1569-1861\(11\)70006-7](http://dx.doi.org/10.1016/S1569-1861(11)70006-7).
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. *Annual Review of Psychology*, *55*, 745–774
- Greenglass, E., Fiksenbaum, L., & Eaton, J. (2006). The relationship between coping, social support, functional disability and depression in the elderly. *Anxiety, Stress and Coping*, *19*(1), 15-31.
- Jung, M., Muntaner, C., & Choi, M. (2010) Factors Related to Perceived Life Satisfaction Among the Elderly in South Korea. *Journal of Preventive Medicine and Public Health*, *43*(4): 292-300. doi: <http://dx.doi.org/10.3961/jpmph.2010.43.4.292>.
- Kuiper, N.A. (2012). Humor and resiliency: Towards a process model of coping and growth. *Europe's Journal of Psychology*, *8*(3), 475-491.
- Lau, R., Morse, C.A., & Macfarlan, S. (2010). Psychological factors among elderly women with suicidal intentions or attempts to suicide: A controlled comparison. *Journal of Women & Aging*, *22*(1), 3-14.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer. In Ben-Zur, H. (2002). Coping, affect and aging: the roles of mastery and self-esteem. *Personality and Individual Differences*, *32*, 357-372.
- Lim, L.L., & Kua, E. (2011). Living Alone, Loneliness, and Psychological Well-Being of Older Persons in Singapore. *Current Gerontology and Geriatrics Research*. Retrieved from <http://www.hindawi.com/journals/cggr/2011/673181/>
- Maneerat, S., Isaramalai, S., & Boonyasopun, U. (2011). A conceptual structure of resilience among Thai elderly. *International Journal of Behavioural Science*, *6*(1), 24-40.
- McDowell, I. (2010). Measures of self-perceived well-being. *Journal of Psychosomatic Research*, *60*, 69-79.
- Momtaz, Y. A., Hamid, T. A., Ibrahim, R. Yahaya, N. & Abdullah, S. S. (2012). Moderating effect of Islamic religiosity on the relationship between chronic medical conditions and psychological well-being among elderly Malays. *Psychogeriatrics*, *12*(1), 43-53.
- National Library of Singapore. (2012). O'Joy Care Services. Retrieved from <http://was.nl.sg/details/www.ojoy.org.html>
- Niti, M., Ng, T.P., Kua, E.H., Ho, R.C., & Tan, C.H. (2007). Depression and chronic medical illnesses in Asian older adults: the role of subjective health and functional status. *International Journal of Geriatric Psychiatry*, *22*, 1087–1094.
- Nygren, B., Aléx, L., Jonsén, E., Gustafson, Y., Norberg, A., & Lundman, B. (2005): Resilience, sense of coherence, purpose in life and self-transcendence in relation to perceived physical and mental health among the oldest old. *Aging & Mental Health*, *9*(4), 354-362.
- Nyunt, M. S. Z., Fones, C., Niti, M., & Ng, T.-P. (2009). Criterion-based validity and reliability of the Geriatric Depression Screening Scale (GDS-15) in a large validation sample of community-living Asian older adults. *Aging & Mental Health*, *13*(3), 376-382.
- Ouwehand, C., De Ridder, D. T. D., & Bensing, J. M.(2007). A review of successful aging models: Proposing proactive coping as an important additional strategy. *Clinical Psychology Review*, *27*, 873-884.
- Scali, J., Gandubert, C., Ritchie, K., Soulier, M., Ancelin, M. L., & Chaudieu, I. (2012). Measuring resilience in adult women using the 10-items Connor-Davidson Resilience Scale (CD-RISC). Role of trauma exposure and anxiety disorders. *PLoS ONE*, *7*(6): e39879. DOI: 10.1371/journal.pone.0039879.
- Schwengel, A., Niti, M. M., Tang, C., & Ng, T. P. (2009). Continued work employment and volunteerism and mental well-being of older adults: Singapore longitudinal ageing studies. *Age and Ageing*, *38*, 531-537.

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- Singapore Government Department of Statistic. (2013). Population and population structure. Retrieved from <http://www.singstat.gov.sg/>.
- Stewart, D. E., & Yuen, T. (2011). A systematic review of resilience in the physically ill. *Psychosomatics*, 199-209.
- Svetina, M. (2014). Resilience in the context of Erikson's theory of human development. *Current Psychology*, 33(3), 393-404. DOI: 10.1007/s12144-014-9218-5.
- Vaingankar, J. A., Subramaniam, M., Chong, S. A., Edelen, M. O., Picco, L., Lim, Y. W., ... Sherbourne, C. (2011). The positive mental health instrument: development and validation of a culturally relevant scale in a multi-ethnic Asian population. *Health and Quality of Life Outcomes*, 9, 92.
- Wang, L., Zhanbiao, S., Zhang, Y., & Zhang, Z. (2010). Psychometric properties of the 10-item Connor-Davidson Resilience Scale in Chinese earthquake victims. *Psychiatry and Clinical Neurosciences*, 64, 499-504.
- World Health Organisation. (2014). *Gender and women's mental health – Gender disparities and mental health: The facts*. Retrieved from [http://www.who.int/mental\\_health/prevention/genderwomen/en/](http://www.who.int/mental_health/prevention/genderwomen/en/)
- Zeng, Y., & Shen, K. (2010). Resilience significantly contributes to exceptional longevity. *Current Gerontology and Geriatric Research*, 525693, DOI: 1155/2010/525693.