MEDIATING ROLE OF COPING STYLE BETWEEN PERSONAL AND SOCIAL ENVIRONMENTAL FACTORS WITH DEPRESSION AMONG OLDER PERSONS AT XI'AN, CHINA

By

GUO KUN

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

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October 2022

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Introduction: China has the world's largest population and the most significant number of older persons. Similar to other countries, a rapidly ageing process brings along various health implications to the older community in China, including the increasing prevalence of mental health problems, particularly depression.

Objective: By employing the social cognitive theory, this study aimed to determine the mediating role of coping style between personal factors, social environmental factor with depression among the older persons living in Xi'an city.

Methodology: This is a cross-sectional study involving older persons aged 60 years old and older in the six urban districts of the Xi'an city. Data was collected by face-to-face interviews using a validated and pre-tested questionnaire. Convenient sampling was used to recruit 300 older persons who fulfilled the pre-determined inclusion criteria. Data were analysed using the IBM SPSS version 26 for descriptive and bivariate analysis, whereas the relationship between variables were identified through path analysis using the Lavvan package of R software.

Results: A total of 300 older persons aged 60 years old and older participated in this study, with 31.7% were identified to have major depression. Higher mean score was observed for respondents with positive coping style (23.03±0.43). Only four paths produced significant relationships between personal factors, social environmental factor, and behaviour factor with depression. Significant direct relationships were observed between the presence of chronic disease (β=-0.083, $p<0.05$) and coping style (β=-0.432, $p<0.05$) with depression, as well as social support and coping style (β=0.132, $p<0.001$). Coping style was only found to significantly mediate the relationship between social support and depression (β=-0.061, $p<0.001$).

Conclusion: This study highlighted the high prevalence of depression among the older persons aged above 60 years in Xi'an City, which were dominated with those with major depression. Coping style was only found to significantly mediate the association between social support and depression.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERANAN PENGANTARAAN CARA DAYA TINDAK ANTARA FAKTOR PERSEKITARAN PERIBADI DAN PERSEKITARAN SOSIAL DENGAN KEMURUNGAN DALAM KALANGAN WARGA TUA DI XI'AN, CHINA

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Pengenalan: China mempunyai populasi terbesar di dunia dan bilangan warga emas yang paling ketara. Sama seperti negara lain, proses penuaan yang cepat membawa pelbagai implikasi kesihatan kepada komunti berusia di China, termasuk peningkatan prevalens masalah kesihatan mental, terutamanya kemurungan.

Objektif: Dengan menggunapakai teori kognitif sosial, kajian ini bertujuan untuk mengenalpasti peranan pengantara gaya daya tindak antara faktor peribadi, faktor persekitaran sosial dengan kemurungan dalam kalangan warga emas yang tinggal di bandar Xi'an.

Kaedah: Kajian ini adalah kajian keratan rentas yang melibatkan warga emas berumur 60 tahun ke atas di enam daerah bandar di bandar Xi'an. Data dikumpul melalui temu bual bersemuka dengan warga emas menggunakan soal selidik yang telah disahkan dan telah diuji. Persampelan yang mudah digunakan untuk merekrut 300 orang warga emas yang memenuhi kriteria kemasukan yang telah ditetapkan. Data dianalisis menggunakan IBM SPSS versi 26 untuk analisis deskriptif dan bivariat, manakala hubungan antara pembolehubah dikenal pasti melalui analisis laluan menggunakan pakej Lavvan perisian R.

Keputusan: Seramai 300 orang warga emas berumur 60 tahun ke atas telah mengambil bahagian dalam kajian ini, dengan 31.7% telah dikenal pasti mengalami kemurungan major. Skor purata yang tinggi didapati pada responden yang mempunyai gaya daya tindak positif (23.03±0.43). Hanya empat laluan menghasilkan hubungan yang signifikan antara faktor peribadi, faktor persekitaran sosial, dan faktor tingkah laku dengan kemurungan. Pemodelan persamaan struktur (SEM) mendedahkan hubungan

langsung yang signifikan antara kehadiran penyakit kronik (β=-0.083, $p<0.05$) dan gaya daya tindak (β=-0.432, $p<0.05$) dengan kemurungan, serta sosial gaya sokongan dan daya tindak (β=0.132, $p<0.001$). Gaya daya tindak hanya didapati menjadi pengantara secara signifikan antara sokongan sosial dan kemurungan (β=-0.061, $p<0.001$), menunjukkan bahawa hubungan signifikan antara sokongan sosial dan kemurungan hanya wujud dengan adanya gaya daya tindak sebagai pengantara.

Kesimpulan: Kajian ini menunjukkan prevalens kemurungan yang tinggi dalam kalangan warga emas berumur 60 tahun dan ke atas di Bandar Xi'an, China, yang didominasi oleh mereka yang mengalami kemurungan major. Walau bagaimanapun, gaya daya tindak sahaja merupakan pengantara signifikan hubungan antara sokongan sosial dan kemurungan.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy.
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LIST OF ABBREVIATIONS

WHO	Word Health Organization
BPSM	Biological-psychological-social Model
CBT	Cognitive Behaviour Theory
HBM	Health Belief Model
SCT	Social Cognitive Theory
BMI	Body mass index
ADLQ	Activities of Daily Living Questionnaire
PSSS	Perceived Social Support Scale
SCSQ	Simplified Coping Style Questionnaire
GDS-15	Geriatric Depression Scale-15
CVI	Content validity index
SEM	Structural Equation Modelling
K-S	Kolmogorov-Smirnov
CFA	Confirmatory Factor Analysis
AVE	Average Variance Extraction
CR	Composite Reliability
RMSEA	Root Mean Square of Error Approximation
GFI	Goodness of fit index
CFI	Comparative fit index
NFI	Normed fit index
TLI	Tucker-Lewis Index
SRMR	Standardized Root Mean Square Residual
SMC	Squared multiple correlations
COVID-19	Coronavirus disease 2019

CHAPTER 1

INTRODUCTION

1.1 Research Background

Globally, people live longer than before, and the notably older persons' growth rate is faster than before especially in the Asian region. The global proportion of older persons aged 60 and above was projected to increase from 11.7% in 2013 to 21.1% in 2050 (United Nations, 2015). According to the United Nations (2015), the number of people living above 60 years of age is expected to rise from 900 million in 2015 to 1400 million in 2030, to 2100 million in 2050, while the number of people over 80 years of age is expected to rise from 125 million in 2015 to 202 million in 2030 and 434 million in 2050. Furthermore, by 2050, approximately 34% of the European population will be those of over 60 years of age and about 25% of the population in Asia, Latin America, and the Caribbean will be over 60 years old at that time, with increment of this population was also projected in Africa from 46 million in 2015 to 147 million in 2050 (The Secretariat, 2016).

A country is assumed to experienced population ageing when the older persons aged 60 years old and older accounted for 10% of the total population in the country, or those aged 65 years and older accounted for 7% of the total population (WHO, 2015a). Compared to the developed countries, the developing countries are experiencing rapid ageing, particularly in the Asian region. By 2050, it was estimated that about 80% of the older persons will be living in the developing countries (UNSDN, 2015). This fast-ageing process brings along various challenges not only to the older persons but also to the country in order to cope with the complex needs of older persons related to the health and social, as well as the economics implications of ageing. From the perspective of health, it will not lead to the increase in the prevalence of non-communicable disease which include mental illness, but also the cost related to managing the illness and the long-term care needs.

As a developing country in the Asian continent, China is also experiencing a rapidly ageing population, with 17.3% or 241 million of the people in China were over 60 years old in 2017 statistics (Zhu et al., 2019). Meanwhile, there were about 487 million people older than 65 years old in China in 2018, which was projected to be nearly 35% in 2050 (Chi, 2018). The rapid ageing population in China has been contributed by the one-child policy causing decrease in the growing fertility rate (Matsangou, 2017), as well as the increasing of life expectancy. China government has provided longevity extension through comprehensive welfare and improved human quality of life make the life expectancy (Costanza et al., 2007). According to Global Health Observatory, while the average life expectancy among the world population rose from 66.5 to 72 years from 2000 to 2016, the average life expectancy rose from 71.4 to 76.25 years from 2000 to 2016 in China (Zhang K. et al., 2020). The ageing population has a significant impact on the China's society, politics, and economy (WHO, 2020a).

The ageing population is associated with many health implications, including the increasing prevalence of mental disorders among older persons. In general, more than 20% of persons over 60 suffer from mental disorders, and 6.6% of disabled older persons over 60 experienced mental health problems (Abdul Manaf et al., 2016). Globally, depression is a common mental health problem that affects older persons and a significant predictor of mortality among them (Bhopal et al., 2012). According to the report of the WHO, depression occurs in 7% of older persons (WHO, 2017). According to the Global Burden of Disease (DALYs) in 2000, depression was the 4th leading cause of disability. By 2020, depression was projected to be the second leading cause of disability in the ranking of DALYs calculated for all ages (Bhowmik et al., 2012). The prevalence of depression among older persons in China has ranged from 14.8% to 23.6%, according to the previous literature (Tang T. et al., 2021). About 13% of older persons who have anxiety also have depression, and 36% of older persons who have depression also have coexisting anxiety (WHO, 2015a).

Various factors were found to contribute towards the occurrence of mental illness among older persons. Based on available evidence, depression is often associated with low socioeconomic status, unhealthy behaviours such as negative coping style, and the presence of other comorbidities such as hypertension, diabetes, and cardio-cerebrovascular disease (World health organization and Calouste Gulbenkian Foundation, 2014). Many studies also have identified a link between social support and depression (Luo & Hu, 2011; Yan H. & Sellick, 2004). Social support refers to the "perceived or actual instrumental and expressive provisions supplied by the community, social networks, and confiding partners" (Kase et al., 2016). Previous study has shown that perceived social support can indirectly or directly reduce stress and improve mental health (Kase et al., 2016). Many researchers have documented unfavourable mental health consequences of lack social support, such as being single (never married, divorced, or widowed), being childless, and living alone among older persons (Liu Yan et al., 2020; D. Su et al., 2012).

Coping style is defined as an individual adjusted cognitive behaviours, beliefs and actions in response towards difficult circumstances, which are commonly caused by the interaction of personal and environmental factors (Xu L. et al., 2017). Coping styles can be either positive or negative, with those practicing positive coping style have better mental health than those who use negative coping styles (Su H. et al., 2018). Coping styles may modulate stressor impact, either serving as protective buffers or amplifying the damaging consequences. According to past studies, effective coping style led to increased happiness, personal growth, and life satisfaction, as well as reduced loneliness and discomfort (Chen L.et al., 2019). Therefore, people who utilize an appropriate coping style can better manage stressful situations and have fewer negative health consequences.

A positive coping style can appropriately seek, apply, and address health concerns. Conversely, the negative coping style has been linked to unhealthy lifestyle behaviour, less self-management, and inappropriate use of health services (WHO Europe, 2020b). Unhealthy behaviour would increase the risk of poor physical functioning, limitations in daily activities, and depression among older persons. A Previous study found that older

persons with a negative coping style would cost more medical fees in daily life, increased emergency visits and hospital admissions, and decreased health care access (Liu Yuetao et al., 2021). People who use an effective or positive coping style would lower the prevalence of depression (Jang et al., 2020). In general, as well as among older persons despite the many ageing related health challenges faced by them. It will not only reduce the manifestation of mental health symptoms but also improve the wellbeing and quality of life of the older persons.

Although it is well established that coping style may have an impact towards the development of health outcomes, such as depression, the mechanisms by which it happens are uncertain. There have been limited local studies in China reporting the relationship between coping style and depression among older persons. Determining the risk factors of depression among older persons in China in general and Xi'an city specifically, as well as the role of coping style is a necessity in view of the increasing prevalence of depression among the older persons in China. This study aimed to explore the mediating role of coping style between the personal and environmental factors with depression among older persons in Xi'an city.

1.2 Statement of the Problems

1.2.1 Ageing Population in China

Similar to other developing countries, China is experiencing rapid ageing process, with older persons referred to as those 60 years old and above, based on the definition by the United Nations (United Nations, 2015). China has the largest number of old persons in worldwide (Sun et al., 2015). China's population is rapidly ageing faster than that any other country in history (United Nations & Department of economic and social affairs, 2018). From an ageing society to an aged society has taken 25 years in China (2002-2027) compare to the United States of America 69 years (1944-2013), Australia has taken 73 years (1938-2011), Sweden has taken 85 years (1890-1975), and France has taken 115 years (1865-1980) (Economic and social commission for Asia and the Pacific, 2016). Ageing population in China is contributed by the significant reduction in mortality and fertility rate. The overall fertility rate per woman decreased from 6.11 to 1.66 between 1950 and 2015 (WHO, 2015b). During the same period, the overall mortality rate dropped from 22.2 to 7.2 per 10,000 people, resulting in a continuous rise in life expectancy (WHO, 2015a). In addition, the average life expectancy at birth has increased from 44.6 years in 1950 to 75.3 years in 2015, and by 2050, it is predicted to reach about 80 years (Yang J. et al., 2018).

There were 7.6% older persons in one billion persons according to the 1982 census of China, and more than 10% older persons in 1.3 billion in 2007 (Flaherty et al., 2007). The proportion continue to increase significantly, with 17.3% of Chinese residents were over 60 (about 241 million) in 2017 (Xu C., 2020). The number of older persons in China is expected to reach 400 million by 2030, which is equivalent to the number of senior citizens in 15 European countries (United Nations, 2015). According to the Economic and Social Survey of Asia and the Pacific, China's population of older persons will reach

487 million in 2050, accounting for approximately 35% of the population (Economic and social survey of Asia and the Pacific, 2016). The increasing proportion of older persons brings various implications, including the increasing prevalence of chronic illnesses that strain on the healthcare system and long-term care, as well as the need for aged friendly environment (Hunduma et al., 2017).

Since the reforming and opening policies implied in China, urbanization speed arrived at the fastest rate in the history of China, with large numbers of older inhabitants (51.8%) living in the cities of China (Meng et al., 2015). According to the Geographical Society of China reports, the urban expansion took 22 years to increase to 39.1% from 17.9% (Xu Yiqian, 2012). The same urbanization rate takes 120 years in the United Kingdom, 80 years in the United States, and more than 30 years in Japan (Xu Yiqian, 2012). Between 1978 and 2015, China had the largest rural-to-urban migration in human history, with the rate of urbanisation rising from 17.9% to 56.1% and the urban population rising from 170 million to 771 million (Yang J. et al., 2018). Between 2010 and 2025, the Ministry of Housing and Urban-Rural Development predicted that 300 million Chinese from rural areas would relocate to cities, increasing the proportion of older persons in China's cities (Sun et al., 2017). By 2025, it aimed to absorb almost 70% of China's population or 900 million people into cities (Ian Johnson, 2013). To relocate inhabitants, the Chinese government has taken steps to demolish rural villages and establish new cities or towns. Deng Xiaoping's leadership caused the demolishment of rural villages and led to massive economic reforms in 1978.

1.2.2 Increasing Depression Symptoms among Older Persons in China

Depression is a common mental health problem among the older persons, particularly among older female due to their higher life expectancy. Worldwide, the prevalence of late-life depression varies between 4.7% and 16.6% (Xu G. et al., 2017). In developed countries, the prevalence of depression among older people ranges between 0.9% and 49%, whereas in developing countries, the prevalence amounts to approximately 21.9% (Xu G. et al., 2017). With increasing age, the physiological and psychological functions of older persons become weakened as well as experiencing changes in social roles, social environment, and life events making them more susceptible to mental health problems. Researchers have found that depression often causes great suffering in late life, such as older persons suffering from depression are prone to risk towards accidental disability and an increased risk of mortality (Liang, 2017). According to a WHO report, the number of persons with mental health problems is growing up because more people live to the age when depression most commonly occurs (WHO, 2017). Most older persons in China suffer from various health problems, from multiple chronic diseases to mental health problems. With the ageing population and the depression increasing, there has been a strain on society, families, and individuals due to the escalating costs of healthcare.

According to the Global Disease Burden Research in 2010, depression was the 9th most common disease affecting Chinese Years Lived with Disability (YLD) (Huang L. jie et al., 2019). Depression reached to the 2nd lead contributor to global burden of disease in 2020 (Bhowmik et al., 2012). Among people over 60, the prevalence of depression ranged from 11% to 57% in China (WHO, 2015b). A previous meta-analysis identified

that depression among China's elderly was 22.7% (Zhang L. et al., 2012). Meanwhile, in a systematic review and meta-analysis of the prevalence of depression among older persons living in care homes in China, the combined prevalence of depression among those over the age of 80 was 30%, which was slightly higher than the other older age groups (22.3% among people 60-70 years and 25% in the 70-80 age group) (Tang T. et al., 2021). With China's ageing population, the rising prevalence of depression among the older persons has become a major health concern. It affects the well-being and quality of life of the older persons and the caregivers in their families.

1.2.3 Contributing Factors of Depression among Older Persons

Older persons are at an increased risk of mental health issues, particularly depression, due to the various life transitions and declining physical function. According to the previous study found that the factors associated with depression among older persons include female, physical unhealth, unhealthy behaviour, lower educational level, residence location, impaired cognition, poor sleep quality, not have health-promoting lifestyle, not have enough social support, and loneliness (Tang S. & Chow, 2017). Understanding depression requires an in-depth analysis of the factors associated with depression. Therefore, considering individual predisposing, enabling, and need factors separately makes sense in examining the factors associated with depression, with the ultimate effect on health outcomes as a general model of access to support in the community (Yang H. et al., 2020).

Depression among older persons can occur due to multiple factors, which include poor social support (Wang Xingmin et al., 2014), and a complication from the presence of debilitating chronic illnesses (Liu X. et al., 2021). The number of "empty-nest" families is fast increasing due to the declining birth rate, population migration, and the tendency of young people to live independently after marriage (Fredvang & Biggs, 2012). The empty nest refers to older persons who live alone or with their spouse and do not have any adult children to provide them with support. It was estimated that the number of empty-nest older persons in China will reach 118 million by 2020, and the proportion of families with empty-nest elderly will reach 90% of all families in China by 2030 (Zhang H. H. et al., 2020). As a vulnerable population, older persons experiencing empty-nest syndrome are more at risk of depression (Zhang H. H. et al., 2020). Older persons are also vulnerable to abuse, including physical, verbal, psychological, economic, and sexual abuse, abandonment, and ignorance, which lead to a severe loss of dignity and respect and eventually lead to depression (Wu Li et al., 2012; Zhao et al., 2017). Worldwide, one in six older persons seems to be affected by abuse (Nobels et al., 2020). Maltreatment of older persons can lead to physical harm and sometimes long-term psychological consequences, including depression.

1.2.4 Impact of Depression on Older Persons

Depression among older persons can lead to numerous consequences, which include poor well-being (Marziali et al., 2008), quality of life (Theodosiou et al., 2011), inability to carry out basic daily activities due to reduced independence (Backe et al., 2018), sleep

disturbance (Ouyang & Sun, 2019), even more suicide (Shen Y. T. et al., 2018). Individuals' mental health is the foundation for their well-being and effective functioning. Few studies in China focus on the elements contributing to an older person's well-being (Gu et al., 2019). However, quality of life is employed as an outcome measure in the evaluating a wide range of health conditions, and wellbeing is a critical indicator that influences the quality of life of older persons (Bowling & Iliffe, 2011). Compared to those with adequate medical services, older persons with fewer medical services are likely to have a lower quality of life and not be healthy (Gu et al., 2019). A previous study found that depression harmed the health outcomes and physical functioning of older persons, and persistent risk of depression negatively affected physical recovery (Chiu et al., 2008). Sleep disturbance is common in people suffering from depression, and previous studies have shown that sleep duration is associated with mental health (Ouyang & Sun, 2019). Some studies find that sleep disturbance in older persons is widespread and has been linked to physiological and psychological factors (WHO, 2014). In particular, depression and hypnotic drugs are significantly associated with poor sleep (Wikipedia, 2020). Moreover, changes in the structure of sleep (such as reduced deep sleep, impaired sleep continuity, and increased sleep duration) can be found in depressed patients (Qin T. et al., 2017). The relationship between depression and sleep disturbance goes both ways; depression increases the risk of poor sleep and poor predicts depression (United Nations, 2015). The previous findings showed that the relationship between mental disorders and suicidal behaviour is controversial (Allen, 2011). Recent research in emerging countries has revealed that mental diseases are on the rise, such as depression as a predictive power for suicidal behaviour (Tiraki & Yılmaz, 2018). Moreover, according to a recent study, when equivalent depression evaluations were utilized across borders, there was no difference between developed and developing countries (Read & Grundy, 2011). Thus, hundreds of research have conclusively demonstrated that mental illnesses, particularly depressive disorders, are among the most potent risk factors for suicide attempts and deaths (Brådvik, 2018).

1.2.5 Mediating Role of Coping Style on Depression

Coping style refers to the cognitive and behavioural patterns used to deal with specific external or internal demands that are deemed to be challenging or even exceeding an individual's resources (Guo J. et al., 2020). It plays a critical role in promoting individuals' preventive behaviour, which may prevent the development of certain diseases, including depression, with negative coping styles indicating a higher risk of depression (Aaby et al., 2017). The existence of coping styles in older people can positively or negatively impact how they understand health-related information and their physical health.

A mediator is an explanatory link in the relationship between the other two variables. The mediator variable might account for testing the mediational effects (Rose et al., 2004). Several studies have attempted to prove that health outcome was affected by the coping style. A previous article found that coping style can impact depression, but not an independent risk factor for depression; instead it involves interaction with other factors such as demographic factors which indicates the potential mediating role of coping style (Chen L. et al., 2019). As early as 1988, a study evaluated the coping style

mediated emotions during stressful encounters in two Caucasian community-residing samples, and found that coping style mediated each of four sets of emotions and stress (Folkman & Lazarus, 1988). According to a recent study, coping humour has a significant role in promoting self-efficacious approaches to health management (Marziali et al., 2008). A study of Chinese adolescents looked into the mediation effect of coping style on the relationships between personality (extraversion, agreeableness, conscientiousness, and neuroticism) and life satisfaction and found that coping style partially mediated the relationships between these four personality traits and life satisfaction, but fully mediated the relationship between openness to new experiences and life satisfaction (Xu L. et al., 2017). A previous study looked into the role of coping style as a mediator between physical activity and public health emergencies and discovered that the mediating role of negative coping style in public health emergencies is significant, while the mediating role of positive coping style in public health emergencies is not (Liu Yuetao et al., 2021). Therefore, coping style may mediate between personal factors and health outcome. Only a few studies have investigated the role of coping style as a mediator between personal and social environmental factors and depression. As a result, it's crucial to investigate the role of coping style as a mediator between personal factors, social environmental factors, and depression.

1.3 Significant of the Study

This research will give a baseline insight into the characteristics of depression among older persons in the China city of Xi'an. The findings will also provide valuable data on coping style as mediating role in depression and personal socio-environmental factors among older persons. It will also assist researchers and policymakers in making policies regarding older adults' coping styles as well as help the medical and health administration departments deal with mental health issues among older persons.

Identifying the factors associated with depression may help to reduce the incidence of depression. In this study, the coping style as the behaviour factor mediating effect the personal factors, environmental factors, and the health outcome is depression, which can provide adequate guidance for health authorities to strengthen health education about health behaviour for older persons.

The findings of this study will benefit the implication of health promotion for older persons. Health promotion for older persons can improve by promoting positive and healthy ageing. Creating situations and environments favourable to healthy living and enabling people to live healthy lives are all part of health promotion for older persons' mental health. Establishing excellent community-based primary mental health care for the elderly. The essentials for good public health and social care for older persons include preventive chronic disease, preventive depression, and health management. Therefore, this study can provide some suggestions for healthcare providers and help them deal with depression associated with ageing. So far, there not have a study focusing on the coping style as a mediator in the personal factors, environmental factors, and behaviour factors with depression among older persons in Xi'an city, so this study has great significance. A longitudinal study will be needed in the future in order to better understand the relationship between personal, social environmental, behavioural factors and depression.

1.4 Research Questions

1.4.1 What is the prevalence of depression among the older persons living in the Xi'an city?

1.4.2 What are the characteristics of the respondents according to the constructs of the Social Cognitive Theory?

1.4.3 What are the relationships between the personal, social environmental and behaviour factors among the older persons living in Xi'an city?

1.4.4 What are the relationships between the personal, social environmental, behaviour factors with depression among the older persons living in Xi'an city?

1.4.5 Does coping style mediates the relationship between personal and environmental factors with depression among the older persons living in Xi'an city?

1.5 Objective

1.5.1 General Objective of the Study

To determine the mediating role of coping style on depression of older persons living in the Xi'an city, through the application of Social Cognitive Theory.

1.5.2 Specific Objective

1.5.2.1 To determine the prevalence of depression among the older persons living in the Xi'an city

1.5.2.2 To describe the characteristics of the respondents according to the personal factor, social environmental and behaviour factors

1.5.2.3 To determine the relationship between the personal, social environmental, and behaviour factors among the respondents

1.5.2.4 To determine the relationship between the personal, social environmental and behaviour factors with depression among the respondents

1.5.2.5 To determine the mediating role of coping style on the relationship between the personal and social environmental factors with depression among the older persons living in the Xi'an city

1.6 Hypotheses

1.6.1 There are significant relationships between the personal, social environmental, and behaviour factors among older persons in Xi'an city

1.6.2 There are significant relationship between personal, social environmental, behaviour factors and depression among older persons in Xi'an city

1.6.3 Coping style significantly mediate the relationship between the personal factors and depression among older persons in Xi'an city

1.6.4 Coping style significantly mediate the relationship between the social environmental factor and depression among older persons in Xi'an city

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