Public Policy Research Funding Scheme

公共政策研究資助計劃

Project Number:

項目編號: 2016.A5.023.16C

Project Title: Promotion of Volunteerism among Hong Kong Retirees:

項目名稱: An Intervention Study

提升香港退休人仕參與自願服務的程度:介入研究

Principal Investigator: Professor CHOU Kee Lee

首席研究員: 周基利教授

Institution/Think Tank: The Education University of Hong Kong

院校/智庫: 香港教育大學

Project Duration (Month):

推行期(月): 18

Funding (HK\$):

總金額 (HK\$): 712,307.00

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Promotion of Volunteerism among Hong Kong Retirees: An Intervention Study

提升香港退休人仕參與自願服務的程度: 介入研究

Final Report

Submitted to

The Policy Innovation and Co-ordination Office The Government of the Hong Kong Special Administrative Region

Report by

Research Team
Department of Asian and Policy Studies
The Education University of Hong Kong
Project No.: 2016.A5.023.16C

30 May 2018

Acknowledgements

The Research Team would like to acknowledge the contribution of all the participants who were involved in this project as well as the effort made by the research assistants and interviewers. Equally, the team wishes to thank all the collaborators in this project, namely Tung Wah Groups of Hospitals elderly services and Hong Kong Sheng Kung Hui Welfare Council elderly services, for their active support, guidance, and advice throughout the study. It should be noted that policy recommendations made in this study are proposed by the Research Team.

The Research Team Department of Asian and Policy Studies The Hong Kong University of Education 30 May 2018

Members of the Consultant Team

Principal	Prof. Kee-Lee CHO U
Investigator	

Associate Vice President (Research) and Chair Professor of Social Policy, Department of Asian and Policy Studies, The Education University of Hong Kong

Core Members Prof. Alice Ming-Lin CHONG

Professor, Department of Applied Social Sciences, City University of Hong Kong.

Dr. Tianyan LI

Assistant Professor, Department of Psychology, The Education University of Hong Kong

Dr. Vivian Weiqun LOU

Associate Professor, Department of Social Work, University of Hong Kong.

Prof. Lisa Marie WARNER

Professor, Department of Psychology, MSB Medical School Berlin, Germany.

Glossary of Terms

EC Experience Corps (EC) Programme

REPRINTS Research of Productivity by Intergenerational Sympathy group

NGOs non-government organizations

LWB The Labour and Welfare Bureau

SWD The Social Welfare Department

NAPP The Neighbourhood Active Ageing Project

OEP The Opportunities for the Elderly Project

DECC District Elderly Community Centre

AVS The Agency for Volunteer Service

RISE Retirees in Service to the Environment

HKD Hong Kong Dollar

PEPP Proper-Effective-Practicable-Plannable

VFI Volunteer Functions Inventory

IBM SPSS The Statistics Package for the Social Sciences

HKSAR Hong Kong Special Administrative Region

ANCOVA A general linear model which blends ANOVA and regression

ANOVA Analysis of Variance

T-tests Analysis of mean difference

Chi-square Analysis of frequency distribution

test

Mplus A statistical modeling program

WHO World Health Organization

Table of Contents

List of tables6
List of figures
Abstract8
摘要9
Layman Summary on Policy Implications and Recommendations 10
政策建議概要11
Chapter One: Introduction
Chapter Two: Objectives of the Study23
Chapter Three: Methodology24
Chapter Four: Results35
Chapter Five: Discussion and Policy Implication and Recommendations54
Chapter Six: Dissemination of Findings59
Chapter Seven: Conclusion60
References144
APPENDIX
Appendix A: The list of the participating elderly centers
Appendix B: Summary table of intervention protocol, training manual, intervention materials for the experimental group
Appendix C: Table of intervention protocol and intervention materials for active control group
Appendix D: Questionnaires used in the baseline, six-week, three-month, and six-month assessments

List of Tables

Table 1. Descriptive statistics of the remaining participants and those who dropped out	36
Table 2. Descriptive statistics of the experimental and control groups	37
Table 3. Manifest means (M) and standard deviations (SD) of monthly minutes of volunteering by time and group	
Table 4. Manifest means (M) and standard deviations (SD) of VFI subscale scores by time and group	ło
Table 5. Manifest means (M) and standard deviations (SD) of other potential mediators by time and group	11
Table 6. Summary of mediation models predicting volunteering minutes per week at the six-month follow-up with group condition via the six subscales of the VIF as expected mediators at six weeks and three months	5
Table 7. Summary of mediation models predicting volunteering minutes per week at the six-month follow-up with group condition via expected mediators at six weeks and three months4	ļ6

List of Figures

Figure 1. CONSORT flow diagram26
Figure 2. Manifest means of monthly volunteering minutes by time and group39
Figure 3. Manifest means of self-efficacy on volunteerism scale42
Figure 4. Manifest means of action-planning of voluntary work43
Figure 5. Manifest means of self-monitoring of voluntary work43
Figure 6. Manifest means of generativity scale44
Figure 7. Reported are standardised regression coefficients and standardised indirect effects with bootstrapped 95% confidence intervals
Figure 8. Reported are standardised regression coefficients and standardised indirect effects with bootstrapped 95% confidence intervals

Executive Summary

Abstract

Volunteering is found to be positively associated with psycho-social well-being, physical health, and cognitive functioning in aged populations. However, compared the aged population in other western countries and other age groups in Hong Kong, the participation rate of Hong Kong older persons in volunteerism is low. Nevertheless, very few studies have been conducted to examine if interventions are effective in motivating and facilitating older adults to engage in volunteerism. To fill this research gap, we conducted a randomized experiment community-dwelling Hong Kong Chinese older people to examine the impact of a theory-based social-cognitive intervention on volunteerism. Self-reported monthly volunteering minutes were measured at baseline, as well as six weeks, three months, and six months after the completion of the intervention. The monthly volunteering times were increased more significantly for participants in the experimental group than for their peers in the active control group six weeks, three months, and six months after the intervention. It is the first time that the moderate-term impact of a social-cognitive intervention on promoting volunteerism in old age has been demonstrated. Moreover, we found that action planning is the mediator in the link between the intervention and the monthly volunteering minutes in this study. We conclude that a one-month face-to-face group program with four weekly one-hour sessions can significantly increase the amount of time older community-dwelling Chinese people in Hong Kong spend volunteering. We recommend that this intervention, following our standardized protocol, is implemented at the territory level through community elderly centers operated by NGOs and funded either by the government or through charity funds.

摘要

參與義務工作對長者的心身健康及其認知能力都有益處。但是本港長者參與義工的百分率較其他西方國家的長者及本港其他年齡組別的人士都為低。縱使這樣,只有極少量研究探討如何有效鼓勵更多長者加入義工的行列。有見及此,我們進行了一項有 264 名家居長者參與的隨機對照實驗。在這研究中,我們測試一個以社交認知理論為本的介入是否能提高長者投入在義務工作上的時間。我們在四個時段收集了長者自己提供每月在義務工作上投入的時間:介入開始之前的基線;介入完畢後的六星期、三個月及六個月。研究發現在實驗組的長者在介入後的六星期、三個月及六個月參與義工(以分鐘計)的時間比起基線都有所增長,而且其增長都比對照組為高。是項研究是首次證實社交認知理論為本的介入可在中短期(三至六個月)發揮作用。而且我們發現計劃參與義務工作是令介入成功增加參與義工的鐘數的重要原因之一。總結今次研究的結果,我們的結論是:一個為期一個月每星期一小時的小組介入能有效提高家居長者參與義務工作的鐘數。因此我們建議由非政府組織在全港的長者中心,根據劃一標準的程序推行這個介入,而財政上由政府或該善基金承擔。

Layman Summary on Policy Implications and Recommendations

- 1. The theory-based intervention we tested in this study is shown to be effective in regard to the promotion of volunteerism in Hong Kong older people in both the short-term and the medium-term. Therefore, we recommend that this intervention with standardized protocol is implemented in all community elderly centers in Hong Kong, so that Hong Kong older adults' engagement in voluntary work can be increased.
- 2. Due to the success of the intervention we examined, more resources should be allocated to utilize this pool of social capital in community programs and further promotion of this source of social capital should be undertaken. Thus, we recommend that more programs related to the promoting and facilitating of engagement with volunteerism among older people should be funded in the Opportunity for the Elderly Project (OEP).
- 3. Due to the aging population in Hong Kong and the potential of this great pool of social capital of older volunteers, it is important to recognize the possible important role of older adults in the Hong Kong volunteer movement. Third, we recommend that sub-committees that promote volunteerism among older adults should be formed under the Steering Committee in the Promotion of Volunteer Services in the Volunteer Movement.
- 4. Similar efforts should be made in regard to NGOs that focus on the development of volunteerism, such as the Agency for Volunteer Service (AVS) and Social Career. We recommend that a special task force or sub-committee is formed to promote and encourage volunteering activities in aged populations in these NGOs.
- 5. Our results show that irregular or short-term volunteering is an important component of volunteering activities in old age. Consequently, we recommend that short-term or irregular volunteering is promoted in the aged population.
- 6. When we were implementing our intervention in community elderly centers, we discovered that a good collaborative model involves the elderly service units (the source of volunteers) and the volunteering promotion organization (experts in training volunteers) working together with synergy effect to encourage older adults to volunteer. Therefore, we recommend that these two types of organizations collaborate in regard to the recruitment, training, and retention of older volunteers.
- 7. When we were searching for volunteering opportunities for our participants, we found that volunteering opportunities are currently provided through different channels and websites, such as Volunteer Movement, Easy Volunteer, and Social Career. It is time-consuming, painstaking, and confusing to search through all these sources. Consequently, we recommend that these communication and information management systems are enhanced by establishing a one-stop for contact with recruitment and in regard to the training of volunteers.

政策建議概要

- 1. 研究發現理論為本的介入能有效地在中短期推動本港長者參與義務工作,因此我們 建議全港的長者中心,根據劃一標準的程序推行這個介入,以至更多長者參與義務 工作。
- 2. 是項研究證明一個為期一個月的小組介入能有效提高家居長者參與義務工作的鐘數, 所以我們認為更多資源應分配在這社會資源上,以至致我們能在社區計劃中充分利 用這社會資源,而且應該繼續發掘這資源。因此我們建議老有所為活動計劃應資助 更多鼓勵長者參與義務工作的計劃。
- 3. 長者義工是應對本港人口老化挑戰的一項重要社會資源,所以長者在義工運動上的 角色理應予以重視。**因此我們建議在義工運動的推廣義工服務督導委員會下,設立長** 者義務工作推廣小組。
- 4. 同樣,鼓勵義務工作的非政府組織亦應重視長者義工。因此我們建議在義務工作發展局和香港社職等非政府組織中設立有關長者義工的小組委員會。
- 5. 我們的研究發現大部份長者義工都有參與不定期或短期的義工服務,因此我們建議 不定期或短期的義工服務應重點推廣給長者。
- **6.** 當我們在長者中心推行是項研究時發現,長者服務單位與鼓勵義務工作的非政府組織可成為合作伙伴,產生協同效應有效推行長者義工運動。因此我們建議這兩類組織能在招募、訓練、及維持長者義工上合作無間。
- 7. 當我們為長者找尋義工服務機會時發現這些資訊在不同渠道或網站上發放,使找尋工作費時失事、感困難及混亂。因此我們建議設立一個統一的一站式平台,提供義工服務機會及其訓練的資訊,

Chapter One: Introduction

- Hong Kong is facing a previously unwitnessed demographic change due to its 1.1. unprecedented aging population, caused by longer life expectancies and declining fertility rates. The number of elderly people aged 65 and older will more than double from 1.16 million (16.6% of the general population) in 2016 to 2.37 million (31.1% of the general population) in 2036 (Census and Statistics Department, 2017). Moreover, the aged population will remain at over 2.3 million for three decades from 2036 to 2066 (Census and Statistics Department, 2017). Although the aging population is challenging for policy makers, elderly people also represent an important source of social capital. This growing aged population is diverse, with different economic, health, and social resources. Their human capital influences their opportunities and preferences regarding participation in volunteering activities. This is especially true in light of the fact that the future cohort of older adults will be better educated, more affluent, and many of them will have work-related skills that make them more likely to engage in volunteering. In particular, the percentage of older people with a secondary school education or higher increased from 25% in 2006 to 39.6% in 2016 (Census and Statistics Department, 2018).
- Volunteering is considered a win-win-win situation, because the opportunity to 1.2. "give back" not only enhances the health and psychological well-being of volunteers but also bring benefits to the beneficiaries of the voluntary work, as well as to the community as a whole (Morrow-Howell, 2010). Older people are often perceived as beneficiaries of volunteering endeavors and their contributions to voluntary work have received little attention in the past. Due to the aforementioned demographic shift occurring, policy and strategies used to promote voluntary work in old age are of growing importance. In searching for measures with which to promote volunteering among older adults, this report aims to answer this important question by conducting a randomized experiment in which we evaluate the impact of a theory-based social-cognitive intervention on encouraging older Hong **Kong citizens to volunteer.** In this context, it should be noted that previous empirical investigations have demonstrated the positive impact of engagement in volunteering activities in old age.

Benefits of Volunteering Activities in Old Age

1.3. A large body of evidence obtained from longitudinal observational studies points to a wide range of positive effects of volunteering for older people, including psychosocial well-being, physical health, and cognitive functioning through increases in social, physical, and cognitive activities (Anderson et al., 2014). Regarding psychosocial functioning, volunteering predicts a reduction in depressive symptoms (Kahana, Bhatta, Lovegreen, Kahana, & Midlarsky, 2013; Lum & Lightfoot, 2005; McDonnall, 2011), higher levels of positive affect and happiness (Fonda & Herzog, 2001; Thoits & Hewitt, 2001), and greater life

satisfaction (Kahana et al., 2013; Van Willigen, 2000), as well as stronger self-efficacy and higher levels of self-esteem (Li, 2007; Thoits & Hewitt, 2001). In a recent study, it was found that volunteering is associated with lower levels of loneliness for those who have recently become widowed (Carr, Kail, Matz-Costa, & Shavit, 2018). In other words, engagement in voluntary work can buffer the detrimental impact of bereavement on older adults' loneliness. According to the Social Benefit Hypothesis (Li & Ferraro, 2005), volunteering appears to influence psycho-social well-being through the formation of meaningful social relationships.

- 1.4. Because volunteering allows older people to remain active, productive, socially connected, and engaged in the community, it is consistently associated with a number of physical health indicators, such as self-rated health (Lum & Lightfoot, 2005; Tang, 2009), functional capacity (Jung, Gruenewald, Seeman, & Sarkisian, 2010; Li & Ferraro, 2006), slower progression of functional disability (Carr, Kail, & Rowe, 2018), and medical conditions, such as hypertension (Burr, Tavares, & Mutchler, 2011), inflammation (Kim & Ferraro, 2014), and hip fractures (Warburton & Peel, 2008). Volunteering facilitates enhance physical health through psychosocial pathways, including stress-buffering effects that attenuate the harmful impact of stressors on health, as well as positive emotional exchanges, associated lifestyle factors, self-esteem, and a sense of purpose in life (Cohen, Gottlieb, & Underwood, 2000; Matz-Costa, Carr, McNamara, & James, 2016).
- 1.5. Ultimately, these proximal physical health outcomes have been proven to lead to lower mortality risks among a portion of older volunteers, even after this result was adjusted for possible confounding elements (Lee, Steinman, & Tan, 2011; Okun, Yeung, & Brown, 2013). Two competitive hypotheses are proposed to explain why only some older adults benefit more in relation to survival due to volunteering (Oman, Thoresen, & McMahon, 1999, Okun et al., 2010). According to the Compensatory Hypothesis, volunteering only reduces the risk of death among those with fewer resources, for example, those with a functional disability (Okun et al., 2010). The Complementary Hypothesis posits that the association of volunteering with the risk of mortality is significant only for able-bodied older people (Rogers, Demakakos, Taylor, Steptoe, Hamer, & Shankar, 2016).
- 1.6. Beside psycho-social well-being and physical health, volunteering is also found to be associated with the betterment of cognitive functioning in older adults (Fried et al., 2004). Increases in physical, social, and cognitive activity due to engagement in voluntary work lead to the enhancement of cognitive functioning through the improvement of mental and neurological health (Guiney & Machado, 2018). To our knowledge, five longitudinal studies have been conducted to examine the association between voluntary work at baseline and global cognitive functioning at follow-up assessments (Schwingel et al., 2009; Hsu, 2007; Kim, Arai, & Kim, 2017; Tomioka, Kurumatani, & Hosoi, 2016; Hughes, Flatt, Fu, Chang, & Ganguli, 2013). Two studies found a small but significant association between volunteering status at baseline and changes in cognitive performance in older women (Tomioka et al., 2016) and a lower likelihood of the onset of severe cognitive impairment (Hughes et al., 2013). The remaining three studies showed

no significant link between volunteerism and global cognitive functioning (Schwingel et al., 2009; Hsu, 2007; Kim, Arai, & Kim, 2017). However, these five longitudinal studies did not take into account changes in voluntary work over time. As a matter of fact, two recent longitudinal studies have demonstrated that continued volunteering over time is associated with a lower risk of cognitive impairment over the study period (Infurna et al., 2016; Griep et al., 2017).

- 1.7. To our knowledge, only one recent longitudinal study has utilized cognitive tests to evaluate the effect of volunteering on domain-specific cognitive functioning in older people. It found that the effect of volunteering activities is statistically significant only in regard to working memory (assessed by a series 7s subtraction test) and cognitive processing (assessed by counting backward), but not in regard to memory, measured by immediate and delayed word recall (Proulx, Curl, & Ermer, 2018).
- 1.8. Older volunteers can be perceived as a potential labor force for non-government organizations. Therefore, volunteerism in old age also has a strong and important economic impact because time donated to organizations means that either the government or individual families are relieved of the financial cost of providing such services. In terms of the economic effect of this, the monetary value of older volunteers in the United States was estimated to be as high as USD 193 billion in 2016 as 63 million American volunteers spent eight billion hours of their time volunteering (Independent Sector, 2012). It is estimated that the total economic value of volunteering around the globe was USD 1.4 trillion in 2005 (Salamon, Sokolowski, & Haddock, 2011). Volunteering activities are also associated with fewer nights spent in the hospital (Kim & Konrath, 2016); therefore, health care costs for the aged population are reduced.
- The Experience Corps (EC) Programme is the first and only published 1.9. randomized control trial in which the benefits of volunteering among older adults are examined (Fried et al., 2004; Fried, Freedman, Endres, & Wasik, 1997; Glass et al., 2004; Rebok et al., 2004). Briefly, the EC Programme is a community-based program designed to enhance older adults' physical, cognitive, and social activity. Specifically, older adults aged 65 and older are randomly assigned to a group of volunteers working in public elementary schools, or to a waitlist control group. Volunteers serve an average of 15 hours per week, performing a variety of activities, such as supporting literacy development from kindergarten through to grade 3, supporting library functions, teaching conflict resolution to children through problem solving and play, and enhancing school attendance. All these activities are assigned by the school principal, so as to address the unmet needs of the school. Originally, the EC Programme was piloted in five cities in 1995 but, due to its success in enhancing health and functioning in old age (Fried et al., 2004; Glass et al., 2004), it had expanded to 21 cities in the US by the 2000s (Fried et al., 2013).
- 1.10. The reported benefits of volunteering attained through the EC Programme are varied but cover psycho-social, cognitive, and physical health domains. Regarding the psycho-social benefits of the program, the EC Programme is found to reduce

depressive symptoms (Hong & Morrow-Howell, 2010), enhance generativity (Gruenewald et al., 2015), and increase social network size (Fried et al., 2004). In regard to cognitive functioning, the EC Programme improves executive functioning, verbal learning, and memory (Carlson et al., 2009; Carlson et al., 2008). Finally, the EC Programme reduces functional impairment (Hong & Morrow-Howell, 2010), improves self-reported strength (Barron et al., 2009; Fried et al., 2004), increases the amount of walking activity (Varma et al., 2016), and objectively measures walking speed (Barron et al., 2009; Fried et al., 2004).

- 1.11. Another similar program exists in Japan: the Research of Productivity by Intergenerational Sympathy (REPRINTS) group, in which senior volunteers read picture books to preschool or school-aged children (Murayama et al., 2015; Sakurai et al., 2016; Yasunaga et al., 2016). The program has a positive impact on participants' sense of manageability and meaningfulness (Murayama et al., 2015), functional capacity (Sakurai et al., 2016), and self-rated health (Yasunaga et al., 2016). However, the REPRINTS group was not examined through a randomized trial in which participants were randomly assigned to either an experimental or control group. Furthermore, the sample size was quite small; there were only 26 participants in the experimental group (Murayama et al., 2015).
- 1.12. In Hong Kong, it was found in an observational study with a cross-sectional design that post-retirement volunteering is positively associated with higher levels of self-efficacy, greater life satisfaction, and less psychological distress (Wu, Tang, & Yan, 2005). A voluntary home-visit program showed positive effects of volunteering on the psychological well-being of volunteers (Lou & Chan, 2011). Moreover, volunteering in regard to intergenerational activities has a positive effect on intergenerational solidarity (Aberdeen Kai-fong Association, 2012) and social capital in the community (Chan & Ping, 2006). It should be noted that all these local observational studies are based on cross-sectional data and future studies must be undertaken to collect longitudinal data with a randomized experimental design, in order to confirm the causal relationship between volunteering activities and their health benefits in Hong Kong's aged population.

<u>Definition of Voluntary Work</u>

1.13. Voluntary work can be performed on a formal or informal basis, or both. According to the International Labour Office (2011), formal volunteering or organization-based volunteering is defined as unpaid non-compulsory work in an organization or as being a member of voluntary associations or groups without being paid. Informal volunteering or direct volunteering includes non-compulsory services given to friends, family members, or neighbors without pay. This research focuses on formal volunteering because this type of voluntary work has been shown in a recent meta-analysis to be associated with lower levels of mortality (Okun et al., 2013) and it does not overlap with family caregiving, which has been intensively investigated in the past few decades and shows negative effect on caregivers health in some studies (Roth, Fredman, & Hawley, 2015; Schulz & Beach, 1999). In this study, we define voluntary work as any service provided by individuals who willingly contribute their time and effort without

monetary or material returns, through formal organizations, such as non-government organizations (NGOs).

Prevalence of Volunteers in Hong Kong

- Despite the positive effect of volunteering, the participation rate of older adults in 1.14. voluntary work in Hong Kong is comparatively low (Chong, 2010; Chong, Rochelle, & Liu, 2013; Wu et al., 2005). In a phone survey of the general population conducted in 2009, almost two-thirds (64.2%) of 1,514 respondents had never volunteered previously, and only slightly less than one fifth (18.6%) had engaged in voluntary work in the past year (Agency for Volunteer Service, 2011). Moreover, the proportion of current volunteers is decreasing with age. In particular, the participation rate decreased from 31.6% in those aged 15-24 years to only 5.8% in older adults aged 65 and older. Similarly, the participation rate was only 7.6% among retirees, with over 80% of retirees having never participated in any voluntary work. In Hong Kong, the most popular reasons for not participating in voluntary work among those aged 55 years and older were "no time" (66.6%), "too old" (27.5%), and "physically unable to do it" (15.7%). A similar pattern was found among retirees (no time = 58%, too old = 35.4%, physically unable to do it = 19.8%) (Agency for Volunteer Service, 2011).
- 1.15. The participation rate of older adults in volunteering ranges from one-quarter to one-third in Western countries (German Federal Ministry for Family, Senior citizens, Women and Youth, 2010; Statistics Canada, 2012; U.S. Bureau of Labor Statistics, 2013). For instance, almost one-quarter (24.1%) of older adults aged 65 and older in the U.S. (U.S. Bureau of Labor Statistics, 2013) and slightly more than one-third of those in Canada (36.5%) (Statistics Canada, 2012) and Germany (German Federal Ministry for Family, Senior citizens, Women and Youth, 2010) engage in voluntary work. Even more importantly, volunteering participation for older people doubled in the period from 1965 to 2015 (U.S. Bureau of Labor Statistics, 2013). In other words, the participation rate of older adults in volunteering is substantially lower in Hong Kong than in other countries, such as the U.S., Germany, and Canada. Therefore, there is much more room for Hong Kong older people to improve in regard to their engagement in volunteerism.

Current Efforts in Hong Kong

1.16. The Labour and Welfare Bureau (LWB) and the Social Welfare Department (SWD) have provided financial resources for social service agencies and district organizations to implement the Neighbourhood Active Ageing Project (NAPP) and the Opportunities for the Elderly Project (OEP), to help Hong Kong's retirees to maintain active and productive lives. Furthermore, in 2008, the NAPP was launched by the LWB and the Elderly Commission to mobilize older adults to serve the community. Since its implementation, a total of 230 projects have been funded. The Population Policy: Strategies and Initiatives announced that resources for the NAAP were re-allocated to the OEP.

- 1.17. The OEP has been implemented by the SWD since 1998, to promote a sense of worthiness among older adults through social service organizations, district organizations, and educational institutes. The aim of the OEP is to provide opportunities for older adults to continuously contribute to society through the actualization of their potential. Since 2012, the OEP has adopted a biennial theme and increased the duration of the projects from one year to two years. A total of 276 activities (157 for one-year projects and 119 for two-year projects), such as health seminars and handicraft classes, were funded in the 2016-2018 biennial financial years. The theme for 2018-2020 is "the neighborhood supports warming the heart and generational ties to please the soul", which aims to nurture mutual care and support among neighbors and foster the development of an age-friendly city. Although promoting voluntary work is one of four main objectives of the OEP for 2018-2020 biennial theme, not many funded projects are planned help achieve this particular aim.
- 1.18. In 1998, the Social Welfare Department launched the Volunteer Movement, in which volunteering services are promoted in a systematic and effective way. The objectives of the Volunteer Movement are to establish a caring society, make use of resources in the community, improve people's sense of belonging, and to enhance the positive value of self-fulfillment by providing a wide range of resources and information to facilitate individuals and organizations in engaging in volunteering activities. The number of registered volunteers increased from 173,144 in 1998 to 1.3 million in 2018, while the volunteer service hours have increased from 3.8 million hours in 1998 to 26.2 million hours in 2016 (https://www.volunteering-hk.org/aboutvs/vs intro/vs stat). In 2003, the Steering Committee on Promotion of Volunteer Service was formed to oversee the overall promotion strategies and plans for volunteerism in Hong Kong; four sub-committees target promotional activities to different groups, such as students, corporations, and community organizations, but none are specifically targeted to the aged population or retirees.
- Beside the government's efforts, there are several NGOs that also promote the 1.19. development of sustainable volunteerism, such as the Agency for Volunteer Service (AVS) and Social Career. The AVS was established in 1970 and is now financially supported by the government, the Community Chest of Hong Kong, the Hong Kong Jockey Club Charities Trust, and public and private donations. The AVS provides a range of services including volunteer referral services, the development of a volunteer talent bank, territory-wide volunteer campaigns, the provision of overseas volunteering opportunities through a partnership with United Nations Volunteers, and the provision of training at various levels. To promote the recognition of volunteers, the AVS celebrates International Volunteer Day and launched the Hong Kong Volunteer Award in 2005 to increase public awareness and recognition of the contributions made by volunteers to society. Despite the efforts made by the Hong Kong SAR government and other NGOs, the participation rates in voluntary work among Hong Kong's older adults remain quite low. Therefore, encouraging a greater number of older adults to engage in voluntary work is important, especially in the aging context.

Intervention to Encourage Volunteering Activities in Old Age

- 1.20. Surprisingly, very few studies have been conducted regarding the specific promotion of volunteerism in the aged population (Pillemer et al., 2017; Tan et al., 2010) (Warner, Wolff, Ziegelmann, & Wurm, 2014). Instead of focusing primarily on health benefits, social marketing strategies used to recruit participants for the EC Programme encourage volunteering activities by appealing to generativity (Tan et al., 2010). Recruitment strategies have included personal media channels, such as word-of-mouth recruitment through social networks; selective media channels, such as church bulleting, community outreach talks, and direct mailing through formal organizations like the American Association of Retired Persons; and mass media campaigns through the radio, newspapers, and television (Tan et al., 2010). However, these studies have only examined the feasibility of this approach and its effectiveness has not been tested in a randomized experiment.
- Another volunteering program for older people, Retirees in Service to the 1.21. Environment (RISE), was developed to promote the engagement of older people in voluntary work regarding the environment (Pillemer et al., 2017). RISE is an eight-week program composed of three components: one full-day experience, the Skills for Environmental Action and Leadership training workshop; an 18-hour educational workshop (six 3-hour weekly sessions over a period of six weeks); and a stewardship project. RISE was implemented with a partnership between one service unit for older people and one NGO dedicated to environmental education. The NGO is responsible for providing access to the program for potential participants. RISE was implemented across 11 sites, with 149 participants recruited from these sites; 84% of recruited participants completed the program (Pillemer et al., 2017). Again, the study of this program focused on identifying the benefits of the program for older people but not the effectiveness of the recruitment strategies used in the program, and, similar to previous studies, it is not a randomized trial with a control group; no random group assignment was carried out.

Social-Cognitive Theories of Volunteering

Recent studies have shown that a positive attitude toward voluntary work, 1.22. self-efficacy in regard to engaging in volunteerism, and social support related to volunteering are positively associated with participation in voluntary work (Grano, Lucidi, Zelli, & Violani, 2008; Greenslade & White, 2005; Morrow-Howell, Hong, & Tang, 2009). This view is supported by the theory of planned behavior (Warburton, Terry, Rosenman, & Shapiro, 2001). In other words, individuals who acknowledge the positive consequences of volunteering report higher capacities to carry out voluntary work and receive approval and support from their significant others in regard to their voluntary work, and are more likely to be motivated to Although these factors contributing to volunteering well-established in cross-sectional and longitudinal surveys, until recently, a causal relationship has not been verified in studies adopting an experimental design.

- Although a number of intervention studies have been conducted among adolescents (Wilson, Allen, Strahan, & Ethier, 2008) and parents of four-year-old to 17-year-old children (Fisher & Ackerman, 1998), based on social-cognitive theories regarding volunteering, only one study has evaluated an intervention based on social-cognitive theory in relation to older adults. In a recent study conducted by one of our co-investigators, Dr. Warner, in Germany, older adults were randomly assigned to a social-cognitive intervention based on the health action process approach (Schwarzer, 2008) developed to promote volunteering, an active control intervention designed to motivate physical activity, and a passive waiting list control group (Warner et al., 2014). In the social-cognitive intervention, participants were provided with information regarding the benefits of volunteering among older adults, reminded of their past success, encouraged to set goals and develop plans, and exposed to modeling behavior. The study found that the volunteering intervention had a significant effect on the self-reported weekly volunteering minutes of the participants six weeks after the intervention, compared with the other groups (Warner et al., 2014).
- 1.24. Despite the evidence supporting the feasibility of promoting volunteerism among older people found in Warner's study (Warner et al., 2014), one major limitation found in her study is that the participation in volunteering was only measured at two weeks and six weeks after the completion of the intervention. Therefore, only the short-term effect of volunteering was evaluated (Warner et al., 2014) and it is still unknown if the intervention is effective for longer periods of time after the intervention. To fill this important research gap, in this current project, we measured both short- and medium-term intervention effects by obtaining the rates of volunteerism participation at six weeks, three months, and six months, during follow-up assessments. Thus, the first objective of this study is to examine the short- and medium-term effects of a theory-based social-cognitive intervention on voluntary work among Hong Kong's older adults through a randomized controlled experiment.

Mediators Underlying the Mechanism

- 1.25. Another limitation of Warner's study is that possible mediators in the link between the intervention and the outcome measures have not been examined. Consequently, the possible mechanisms underlying the effects of the intervention on the initiation and maintenance of volunteering are still largely unknown because possible mediators were not measured in the previous study (Warner et al., 2014). To fill this crucial research gap, in this study, we examine a number of possible mediators, so as to uncover the mechanisms prompted by the intervention.
- 1.26. As Warner and her colleagues have suggested, the expected outcomes of engaging in voluntary work (e.g., the perception of advantages for others as well as for oneself through voluntary work) may be a major mediator in the link between the intervention and volunteerism in people who have not yet volunteered. According to the Functional Theory of Volunteerism, there are six categories of volunteering motives that drive individuals to participate in volunteering activities (Clary &

Snyder, 1991; Okun & Schultz, 2003). First, career motives include motives to maintain skills related to current careers or to prepare for future careers. Second, social motives refer to volunteers' motives in regard to improving social relationships. Third, understanding motives include motives to acquire new skills, knowledge, and experiences for the sake of personal development. Fourth, value motives are volunteers' motives to demonstrate their value in regard to altruism and humanity by engaging in volunteerism. Fifth, protective motives include motives to ensure that volunteers are good and capable individuals and to protect them from traits associated with negative characteristics. Finally, enhancement motives are motives to improve self-esteem, self-worth, and positive emotions. A previous study has found that social motives are more important for older people than for younger individuals (Okun & Schultz, 2003) but the reverse is true for career, understanding, and protective motives (Clary et al., 1996). Similar findings are reported in Hong Kong Chinese populations (Ho et al., 2012). Specifically, age was positively associated with social and value motives and inversely related to career motives among Hong Kong volunteers. The positive impact of social motives on physical well-being is only found in older volunteers, not in middle-aged and young volunteers (Ho et al., 2012). These results indicate that the expected outcomes of volunteering activities may mediate the effect of the intervention on volunteering time.

- The health action process approach (Schwarzer, 2008) postulates two phases in 1.27. the process of changing one's behavior. First, individuals must form an intention to change their behavior. According to the Theory of Planned Behavior (TPB), the stronger the behavioral intention an individual has, the more likely he or she will perform the intended behavior (Ajzen, 1991). So, intention to volunteer must be nurtured and formed in our intervention in regard to motivating volunteers, so that older people may start volunteering. The TPB predicts that behavioral intentions are directly driven by attitudes, subjective norms, and the perceived control or self-efficacy of that behavior. According to the health action process approach, this motivation building phase is fostered not only by favorable outcome expectancies for the new behavior mentioned above, but also self-efficacy beliefs – an individual's belief that he or she is able to accomplish successful behavioral changes. According to Bandura (1986), the creator of social-cognitive theory, self-efficacy is the volunteer's confidence in his or her capacity to participate in volunteerism in different situations. Therefore, self-efficacy determines how much effort volunteers will contribute and how long they will persist in regard to volunteering. These findings show that the impact of our social-cognitive intervention on volunteering minutes may be mediated through intention to volunteer and/or self-efficacy in regard to volunteerism.
- 1.28. When individuals have formed an intention, they enter the volitional phase of the behavior change process. In the volitional phase, the translation of good intentions into the initiation of the actual behavior must be prompted by self-regulatory strategies, such as making good plans or monitoring one's behavior closely, in order to stay on track and to maintain the new behavior. These two factors (namely, action planning and the self-monitoring of behavior) are used in the current study because if-then worksheets and 10-day diaries are

used to prompt action planning and self-monitoring in regard to volunteering activities. For older adults who have not or have already initiated voluntary work, action planning (planning how to engage in volunteerism) and self-monitoring (e.g., keeping track of the amount of voluntary work that one does) may be important mediators in the initiation and maintenance of volunteering engagement, respectively (Warner et al., 2014). These two mediators are also in line with the intervention's theoretical underpinnings.

- One particular motivation to volunteer in old age is associated with developmental tasks related to achieving generativity, which is stronger for older volunteers than for younger ones (Warburton & Gooch, 2007). Previous studies have shown that the value of altruism or the desire to help others is a crucial predictor of volunteering in old age (Perry, Brudney, Coursey, & Littepage, 2008). Generative concern is conceptualized as tapping into altruistic values, as older people very often report that volunteerism is a channel through which they can demonstrate their altruistic values (Nelson, Hooker, DeHart, Edwards, & Lanning, 2004; Okun & Schultz, 2003). Through data obtained in the Midlife in the United States survey, generative concern is shown to be one of the predictors of engagement in volunteering (Einolf & Chambre, 2011). Similar findings are reported in another study of young and old adults (Okun & Michel, 2006). In Hong Kong Chinese older adults, generative concern is associated with psychological well-being (Cheng, 2009). These empirical links of generativity and volunteering led to the hypothesis that the intervention effect in the current study might also mediate via an increased sense of generativity.
- Social factors, such as social context, social roles, and social integration, are also persistently associated with volunteerism in later life. Social context is the social environment in which older people decide whether or not to engage in volunteering activities. Accordingly, it is argued that a sense of community may be an important contributor to people's participation in volunteering in later life (Omoto & Snyder, 2002). Sense of community is defined as the "feelings that members have of belonging, a feeling that members matter to one another and to the group and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 9). Individuals with a strong sense of community are more likely to feel obligated to contribute to the community through voluntary work (Omoto & Snyder, 2002). Not surprisingly, sense of community is reported to be one of the main reasons for volunteering (Omoto & Snyder, 1995; Omoto, Snyder, & Martino, 2000). Moreover, it is found that sense of community is a better predictor for volunteerism in older adults than demographic characteristics (e.g., age, gender, race, and age) and other capital variables (such as generative concern, church attendance, and spirituality) (Okun & Michel, 2006).
- 1.31. As the current study focuses on older adults who engaged in formal voluntary work fewer than four times in the past year, we hypothesize that the mediators related to the motivational aspects of the intervention, such as outcome expectancy and the effect of role modeling on self-efficacy, may be stronger mediators underlying the effects of the intervention on our outcome measures

than mediators related to volitional strategies, such as self-monitoring. Nevertheless, volitional intervention techniques are implemented in the intervention to teach participants to remain in their initiated volunteer services, in order to establish sustainable effects. Based on the literature we reviewed, the second objective of this study is to identify mediating mechanisms that explain the effect of the social-cognitive theory-based intervention on volunteerism and the potential mediators we examined are expected outcomes of participation in voluntary work, intention to volunteer, self-efficacy on volunteerism, action planning and self-monitoring in regard to volunteerism, generative concerns, and sense of community.

Chapter Two: Objectives of the Study

- 2.1 The objective of the proposed study is to test a short, face-to-face group intervention to increase volunteer work among community-dwelling older persons based on social cognitive theories of volunteerism through a randomized controlled experiment.
- 2.2 We hypothesize that participants in the experimental group who will engage in the intervention will show higher levels of volunteering at the six-week, three- and six-month follow-ups than participants in the active control group.
- 2.3 The specific objectives are as follows:
- 2.4 To assess the effect of social-cognitive theories-based intervention on levels of volunteer work engagement among older persons in Hong Kong.
- 2.5 To identify mediators in the effect of intervention on the participation rate of volunteering among older persons in Hong Kong

Chapter Three: Methodology

General Design

3.1 This study involves a seven-month randomized controlled intervention trial, in which 264 elderly participants aged 50 years and older were randomized with a two-arm design in terms of receiving either the intervention or active control condition. The current randomized controlled experiment was designed to examine a short, face-to-face group intervention, which aimed to increase volunteering in older adults, based on social-cognitive behavioral change techniques; social-cognitive theories have been proven to be valid in predicting volunteering in old age. The intervention did not impose any specific volunteer services on the participants, but rather encouraged them to choose and organize any specific voluntary work themselves, to prompt long-term volunteering, instead of risking the participants stopping their voluntary work after the study ended.

Sampling and Sample Size

- 3.2 We invited Tung Wah Groups of Hospitals elderly services (nine participating centers) and Hong Kong Sheng Kung Hui Welfare Council elderly services (six participating centers) to participate in the current project. All accepted our invitations. Thus, we conducted the study through 15 local community centers for the elderly (eight District Elderly Community Centers, five Neighborhood Elderly Centers, one integrated service center, and one Social Center for the Elderly), which are located in nine districts of Hong Kong. The list of the participating centers and their location districts can be found in Appendix A.
- Participants were recruited through the following criteria: 1) 50 years of age and older; 2) not acutely physically impaired or disabled; 3) not seriously cognitively impaired or severely depressed; 4) not working on a full-time or part-time basis (fewer than 20 hours per week); 5) able to read and write simple Chinese; and 6) engaged in formal voluntary work fewer than four times in the past year.
- 3.4 Ethical approval for this RCT was obtained by the Human Research Ethics Committee (HREC) of the Hong Kong Institute of Education (HREC number 2015-2016-0324). The study was prospectively registered in the Clinical Trials Registry of the Center for Clinical Research and Biostatistics (CCRB) at the Chinese University of Hong Kong (registration number CUHK_CCRB00543, secondary number 2016.A5.023.16C).

Procedure

- Through the centers for the elderly, participants were scheduled for one of several 3.5 group orientation meetings held at their nearest center, during which details of the study's purpose, the time commitment involved in participating in the study, and the inclusion criteria of the study were explained. Individuals who met the appropriate criteria were asked to sign a written informed consent form. Participants were randomly assigned to two groups: 1) the volunteering intervention group; or 2) the active control group, which received an intervention promoting physical activity. Participants were then interviewed by our research assistants or part-time interviewers in a face-to-face format using the baseline structured questionnaire. All participants were awarded with HKD 200 if they completed the entire study and all four assessments. The intervention lasted for four weeks, with one session conducted each week. After undergoing the intervention, the participants were interviewed three times in a face-to-face format, at six weeks, three months, and six months after the intervention. All interviews were conducted face-to-face by two to three well-trained interviewers. Intensive training was provided to the part-time interviewers, to ensure reliability.
- 3.6 The CONSORT flow diagram in Figure 1 displays the study's dropout rates. After older adults consented to participate in the study, they were randomized into two groups: the volunteering intervention group and the active control group. A total of 384 participants provided informed consent and completed the baseline assessment at the elderly center at which they were recruited in 2017. Of these, 356 participants (180 in the experimental group and 176 in the control group) attended at least three out of the four 1-hour sessions. Only 264 participants (132 in the experimental group and the 132 in control group) completed all three follow-up assessments.

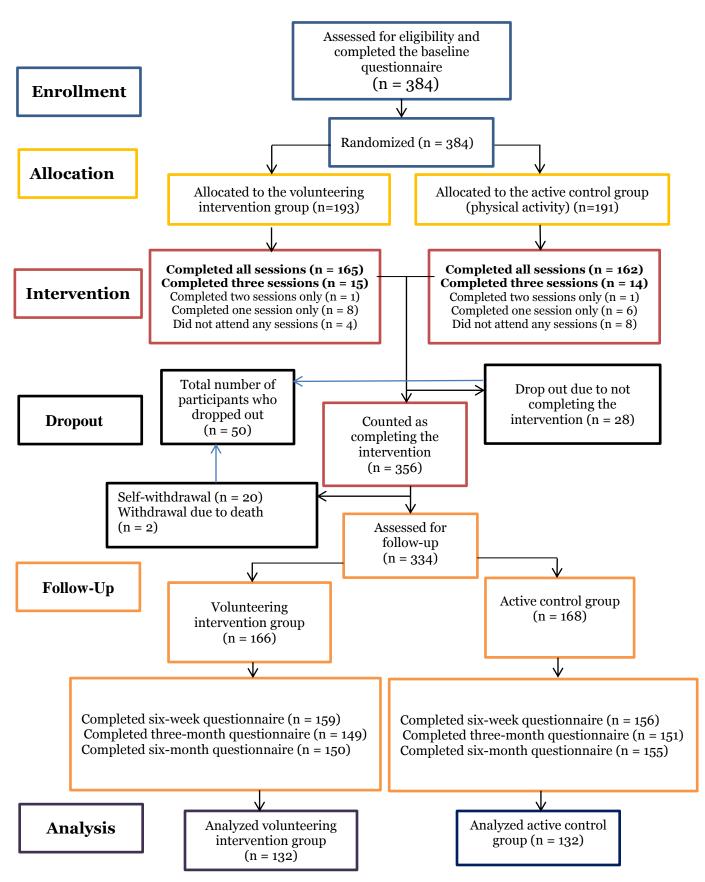


Figure 1. CONSORT flow diagram.

Intervention Condition

- The intervention is adopted from a recent study conducted by one of our 3.7 co-investigators (Warner et al., 2014), which was developed based on the findings of previous observational studies and the health action process approach (Schwarzer et al., 2007). This approach suggests that outcome expectancies and self-efficacy contribute to behavioral intentions in the motivation stage, while intentions are translated into behavior through self-regulation strategies, such as self-monitoring and action planning, in the volitional phase. In pilot test of the intervention, we found that we need four 1-hour sessions to deliver the intervention to our participants so that we have sufficient time to go through the material and have discussion with our participants. We expanded the two-hour session used by Warner et al. to four 1-hour weekly sessions implemented during a period of one month. Summary Table of intervention protocol, an implementation training manual and intervention including PowerPoint files and worksheets (in Chinese), can be found in Appendix B.
- Four 1-hour sessions were conducted: 1) introduction to the study and the 3.8 meaning of retirement; 2) a quiz regarding volunteering engagement; 3) ideas for volunteering engagement; and 4) from thought to action. These topics were delivered to participants through one-hour sessions with two breaks. In the first session, the facilitator briefly introduced the research team, the goals of the study, our target population, schedule, follow-up questionnaire, and the financial incentive. Next, the facilitator used a game through which group members could get to know each other. Third, the facilitator discussed the personal meaning of retirement to participants by asking them about their ideas regarding retirement (e.g., positive or negative connotations, their expectations of their retirement, the elements of their ideal retirement, and their favorite activities to participate in during their retirement). The facilitator wrote down the participants' responses on a whiteboard to acknowledge their ideas; she also provided more ideas, such as the development of hobbies, activities with friends, activities with family, caring for the home, travel, and cultural events. Finally, the facilitator introduced the idea that one of the most important aspects of retirement is doing something for others or taking an active part in volunteering. The facilitator also talked about the social relevance of volunteering engagement, because volunteering can mobilize and help older people to retain knowledge, care for those in need in society, and strengthen social integration and older people's role in society. The individual and societal benefits of volunteering in regard to physical and psychological health, and social and economic aspects in old age were also presented to the participants by the facilitator.
- 3.9 In the second session, the facilitator first discussed the positive outcomes of engaging in voluntary work with the group members. Then, the facilitator asked if

the participants would expect any benefits by being volunteers, whether or not they perceived those benefits as being important, and their underlying reasons for wanting to volunteer. Second, information regarding the positive consequences of volunteering in old age was provided to prompt outcome expectancies. The information was delivered to participants through a quiz on volunteering engagement. The information included the prevalence of volunteering in the Hong Kong general population and among Hong Kong's older people, the future trends regarding volunteering in old age, financial rewards for voluntary work, the reasons for engaging in or barriers to not engaging in voluntary work (too old, too busy, and poor physical health, etc.), and the means to participate in volunteering (e.g., through NGOs, religious organizations, educational organizations, community organizations). The facilitator discussed with group members how to overcome the barriers to volunteering in old age. Finally, the group members were asked to reflect on whether or not they wanted to be volunteers, the reasons behind this decision, and to share their thoughts with other group members.

- 3.10 In the third session, a review of the first two sessions was conducted and the facilitator showed two five-minute video clips in which older volunteers were presented as role models. In the video, an older woman and an older man introduced themselves as being over 70 years old. The man was not able to walk properly, while the woman had not received any formal education. However, the models actively volunteered in social areas by visiting older people who were living alone and by teaching older people how to use computers in elderly centers, respectively. The models expressed the way in which they loved their voluntary work because they felt needed and they could give pleasure to other people; by giving pleasure to others, they received pleasure back. In the video, the models spoke of their experiences in regard to their voluntary work. The models stated how they started their work as volunteers, how they planned to volunteer, and how they enjoyed volunteering immensely.
- After showing the video chips, the facilitator asked the participants to discuss 3.11 what they felt about the models and the most important benefits of being a volunteer from their perspectives. Then, participants were asked to think about the area in which they would like to be active volunteers. The facilitator provided a decision aid by showing different age groups as targets for volunteering, such as children, adolescents, adults, and older adults, as well as some specific vulnerable groups, such as migrants, poor families, people with disabilities, and people with chronic medical conditions. The facilitator introduced to the group members some concrete examples of voluntary work, such as escorting others, doing household chores, acting as receptionists, measuring blood pressure, fund raising, visiting other people, designing posters, taking photos, and reading newspapers or storybooks. Different categories of voluntary work, including clerical work, elderly care, child care, and organizing activities, were also presented to the group members, along with different venues for voluntary work, such as community centers, social service organizations, hospitals, religious groups, cultural organizations, animal shelters, and political parties. Volunteering opportunities at

the elderly center were also briefly mentioned to them by the staff members of the center. We provided a list of volunteering opportunities in each district to the group members and the websites they could use to search for voluntary work opportunities. Finally, the facilitator discussed the amount of time that the participants wanted to spend on volunteering and warned them that excessive volunteering may be detrimental to older adults' health; therefore, participants were also informed that they should identify their optimal level of volunteering per week and should not exceed this level, to prevent burnout. Before the end of this session, participants were asked to set goals related to voluntary work: 1) the organization; 2) the target group; 3) the nature of the voluntary work; 4) personal goal; 5) activities or services; and 6) frequency of participation.

- In the fourth session, participants were asked to focus on past experiences to 3.12 prompt self-efficacy, using a biography worksheet. On this worksheet, the participants were asked to look back on the different periods in their lives. They were asked: 1) to state the hobbies and volunteering engagements they had participated in during the course of their lives; 2) whether or not they participated in these activities regularly; and 3) whether or not they enjoyed performing these activities then and for how long they were active. The course of life was divided into childhood and youth (under 20 years), young adulthood (20-30 years old), and adulthood (40-60 years old). After these recollections, participants were asked if they had engaged in voluntary work based on their hobbies and about volunteering engagements in their late adulthood. Second, the facilitator discussed different personal goals related to engaging in voluntary work (e.g., helping others, doing something meaningful, spending time with others, self-actualization, taking advantage of skills or experiences, improving the community, religious reasons, and learning new skills or knowledge) and participants were asked to discuss their own personal goals in regard to engaging in voluntary work.
- 3.13 Once the participants had established their personal goals and plans to volunteer, the facilitator introduced the Proper-Effective-Practicable-Plannable (PEPP) test to them. In this test, the participants were asked to think about a volunteering engagement that would suit them, whether or not they would enjoy this kind of engagement, and whether or not this engagement was in their own areas of interest for the first P (Proper) of the test. In the E (Effective) of the test, the participants were asked whether or not they thought that volunteering engagement is effective in regard to achieving their own personal goals. In the third P (Practical) of the test, the participants were asked whether or not the plans they had made were practicable and feasible. In the last P (Plannable) of the text, the participants were asked whether or not their formulated volunteering engagement plan fitted with their weekly schedules and was not too demanding.
- 3.14 Third, we asked participants to complete their if-then implementation intentions on a worksheet, to initiate their action planning and use of cues. On this worksheet, participants were asked to come up with different situations, objects,

or people to which they could link a certain volunteering engagement, using if-then sentences. Examples include: "If I have breakfast, then I will go to the agency for a volunteering engagement"; "If I see my calendar, then I will be reminded to look for a volunteering engagement"; "If I meet my friends, I will ask them about their experiences with volunteering engagements." These mental cues could help them to remember their plans.

- 3.15 The participants were asked to discuss the tricks they could use on themselves to make becoming active volunteers easy. The facilitator led the discussion. Beside the tricks participants mentioned themselves, the facilitator introduced a diary to help them to self-monitor their behavior. In the six-month diary, participants were asked to record whether or not they engaged in voluntary work and, if they did, the nature of the voluntary work, the amount of time they dedicated to voluntary work, and how they felt after carrying out or not carrying out the voluntary work (negative or positive) in the coming six months. We also provided a six-month calendar, on which participants could write down the appointments related to their voluntary work in the coming six months.
- 3.16 Finally, the participants were asked to from a self-support group of three to 10 members, through which they could meet on a regular basis to share their volunteering experiences, the benefits of participating in voluntary work, and any barriers or difficulties preventing them from participating in voluntary work. The facilitator also asked them to name three people who could support them in implementing their plans related to volunteering, to prompt social support.

Active Control Group Condition.

3.17 Sessions for the active control group condition were randomized into sessions with content parallel to the intervention condition. In the active control group condition, the participants received the same behavioral change techniques as the intervention condition, with a similar length, but all materials were adapted to physical activity, instead of volunteerism. Similar to what we did in the experimental group, the staff members of the center briefly introduced volunteering opportunities at their center to participants and we also gave a list of volunteering opportunities in each district to the group members and the websites they could use to search for voluntary work opportunities. Summary Table of intervention protocol, intervention materials, including PowerPoint files and worksheets, can be found in Appendix C.

Implementation of the Conditions.

3.18 One experienced social worker and one research assistant were hired to deliver the intervention to the experimental group and the active control group conditions for all sessions, respectively. They were asked to learn all session protocols by heart and read the manual again before every session. The research team provided them with intensive training, through both the manual and role play exercises. Moreover, the sessions were structured using standardized PowerPoint presentations to ensure the comparability of session contents. In ensuring fidelity to the protocol and the quality of intervention delivery, at least five sessions in the intervention condition and five sessions in the active control condition were observed and rated by a third party consisting of Professor Chou and Dr. Li, who were aware of the study protocols.

Outcome Measures

3.19 The structured questionnaires used in the baseline, six-week, three-month, and six-month assessments can be found in Appendix D. The definition of volunteering, as formal volunteering for organizations, was explained to the participants before they answered any scales. Monthly volunteering minutes were measured with three items adopted from Ayalon (2008): 1) "During the past four weeks, on how many days per week did you do voluntary work?"; 2) "If you did voluntary work, how many minutes did one session last on average?"; and 3) "If you did voluntary work, what type of voluntary work did you perform?" A list of 10 categories of activities (i.e., recreational, manual labor, keeping company, domestic, educational, caring in hospices, sociocultural, administrative, social, and managerial) was used. We multiplied the responses to the first two items to create a score for the average monthly volunteering minutes within the past four weeks. All outcome measures were measured six weeks, three months, and six months after the completion of the intervention.

Mediators

The Volunteer Functions Inventory (VFI) (Clary et al., 1998) was used to measure 3.20 participants' motives to volunteer (i.e., the expected outcomes of volunteerism) and participants were asked to indicate how important or accurate each reason for volunteering was for them on a seven-point scale ranging from 1 ("not important or not accurate at all") to 7 ("very important or very accurate"). This scale includes 30 items, measuring six volunteering motives with five items for each motive: 1) value (providing opportunities for individuals to express values regarding humanitarian concerns for other vulnerable people and helping others); 2) understanding (providing opportunities for individuals to acquire new knowledge, skills, and capacities through novel learning experiences); 3) career (providing opportunities for individuals to gain career-related benefits); 4) protection (providing opportunities for individuals to reduce guilty feelings and to solve their own personal problems); 5) enhancement (providing opportunities for individuals to enhance their ego); and 6) social (providing opportunities for individuals to maintain or improve their friendships and to engage in activities admired by their peers or other important friends or family members). Following

the conceptualization of motivation to volunteer established in previous studies (Ho, You, & Fung, 2012; Okun & Schultz, 2003), we separated one item ("volunteering is a way to make new friends") from the enhancement motive subscales and formed a one-item subscale: "Motive to Make Friends". We also dropped the career motive subscales because our participants were retirees or full-time housewives. The internal consistency of the VFI is high in this sample, ranging from 0.91 to 0.94 across the four assessments.

- 3.21 Another measure of the perceived benefits of voluntary work (outcome expectancies) was the Chinese version of the perceived benefits subscale of a scale developed by Warburton et al. (2001), which was used to assess the perceived costs and benefits of being a volunteer. The subscale consists of five items (self-worth, helping those in need, joyful and satisfying, meeting people, and keeping active). These consequences are rated on seven-point bipolar scales ranging from 1 ("extremely unlikely") to 7 ("extremely likely"). The internal consistency of the perceived benefits subscale in our sample is high, ranging from 0.76 to 0.85 in the four assessments.
- 3.22 Intention to volunteer was assessed with the Intention to Volunteer Scale, which contains three items (Wang et al., 2011). An item example is: "Do you agree that you have decided to participate in future volunteering?" Answers range from "strongly disagree" (1) to "strongly agree" (5). The split-half reliability alpha of the Intention to Volunteer Scale is high in this sample, ranging from 0.93 to 0.96 among the four assessments.
- 3.23 Self-efficacy in regard to volunteerism was measured by Wang's volunteering self-efficacy scale, which comprises three items (Wang et al., 2011). The items are: "How much confidence do you have in your ability to participate in volunteer activities?"; "How much confidence do you have to overcome obstacles and challenges in volunteer activities?"; and "How much do you believe that you can participate in volunteer activities?" All items are rated on a five-point scale that ranges from 1 ("not at all") to 5 ("an extreme amount"). The split-half reliability of the self-efficacy related to volunteerism in our sample is high, ranging from 0.89 to 0.93 in the four assessments.
- 3.24 The two volitional strategies, planning and self-monitoring, were assessed by adapting scales from the physical activity domain developed by Sniehotta, Scholz, and Schwarzer (2005). The four items for action plans are: "I have made a detailed plan regarding...", followed by the items (a) "...when to do voluntary work"; (b) "...at which organization to engage in voluntary work"; (c) "...how to do voluntary work"; and (d) "...how often to engage in voluntary work". The two items for self-monitoring read as follows: "During the last four weeks, I have..." (a) "...constantly monitored myself whether I volunteer frequently according to my plans"; and (b) "...watched carefully that I volunteer as often as I intend to". The internal consistency of the Action Planning subscale is high in the current sample,

ranging from 0.92 to 0.97 in the four assessments, while the alpha for the self-monitoring subscale is very high, ranging from 0.97 to 0.99 among the four assessments, even though there are only two items.

- 3.25 The Loyola Generativity Scale (McAdams and de St Aubin, 1992) was used to measure generative concerns using 20 items, in which participants were asked to what degree the following statements describe them on a four-point scale ranging from 1 ("not at all") to 4 ("very much"). Example items include "I try to pass along the knowledge I have gained through my experience", "I feel as though I have made a difference to many people", "I try to be creative in most things I do", "Others would say that I have made unique contributions to society", "I have important skills you can pass along to others", "I have made many commitments to many different kinds of people, groups, and activities in my life", and "People come to me for advice". The scale has been translated into Chinese and used in a recent study (Cheng, 2009) among Hong Kong Chinese older adults. The internal consistency of the Loyola Generativity Scale in our sample is moderate, ranging from 0.76 to 0.80 among the four rounds of data collection.
- 3.26 Sense of community was assessed using a 12-item scale, the Sense of Community Index (Perkins et al., 1990), which has been translated into Chinese and validated in the local community (Mak, Cheung, & Law, 2009). Participants were asked to rate items on a four-point scale ranging from 1 ("agree strongly") to 4 ("disagree strongly"). Items include "I think the street/housing estate that I am living on is a good place for me to live", "People on this street/housing estate do not share the same values", "My neighbors and I want the same things from the street/housing estate", "I can recognize most of the people who live on my street/housing estate", "I feel at home on this street/housing estate", "Very few of my neighbors know me", "I care about what my neighbors think of my actions", "I have no influence over what this street/housing estate is like", "If there is a problem on this street/housing estate, people who live here can get it solved", "It is very important to me to live on this particular street/housing estate", "People on this street/housing estate generally don't get along with each other", and "I expect to live on this street/housing estate for a long time". The split-half reliability of the Sense of Community Index is moderate in our sample, ranging from 0.60 to 0.72 among the four assessments.

Covariates

3.27 Age, gender, years of education, marital status, self-rated health, and number of medical conditions were measured as covariates.

Statistical Analysis

3.28 Descriptive statistics, attrition analyses, and randomized group assignment evaluations were performed in SPSS 24. Regarding the attrition analysis,

differences between the characteristics of participants who completed the study, as well as those of dropouts, were assessed using t-tests for continuous variables and chi-square tests for categorical variables. To evaluate whether or not the random group assignment was successful, we compared the characteristics of participants in the experimental and control groups using chi-square tests and t-tests for categorical variables and continuous variables, respectively.

- The intervention effects were tested with latent change models (Mara et al., 2012; 3.29 Mun, von Eye, & White, 2009) in Mplus 8. This latent change approach has several advantages over traditional variance analyses. It allows the testing of differences from baseline to all post-tests in a single model, instead of multiple tests, and has more power to detect treatment effects, is robust to non-normality, and provides information on individual variability and fit statistics (Mara et al., 2012; Mun, von Eye, & White, 2009). For the self-reported volunteering minutes per month, three latent change scores were created from baseline to six weeks post-test, from baseline to three months follow-up, and from baseline to six months follow-up. These change scores were then regressed on group condition (0 = control group, 1 = experimental group). All models were statistically controlled for age, sex, marital status (o = without, 1 = with partner), education (o = not finished high school, 1 = finished high school), subjective health rating (0 = not poor, 1 = poor), and number of chronic conditions (up to 10 diseases from a list). A conditional model with the baseline as a reference point was set up in accordance with Mun et al. (2009) and latent changes were regressed on control variables. The overall pattern of results did not change when analyzed with missing values as replacements for outliers three SD above the mean, instead of truncations at three SD above the mean. Furthermore, a traditional repeated measures analysis of variance instead of latent change models was derived in a significant time*group interaction F(3,768) = 4.72, p = .003 (statistically controlled for the same control variables).
- 3.30 To test for possible mediators of the intervention effect, manifest path analyses with indirect effects were specified and tested with 95% bias-corrected confidence intervals resulting from 1000 bootstraps tests in Mplus 8. Respective mediators (VIF subscales, intention, perceived benefits, self-efficacy, planning, self-monitoring, generativity, and sense of community) at six weeks and three months, as well as total volunteering minutes per month at the six-month follow-up (outcome), were regressed on their respective baseline scores and the aforementioned control variables, as well as on the group condition.

Chapter Four: Research Results and Discussion

Results

Attrition Analysis

- Among the 384 participants who completed the baseline assessment, 264 4.1 completed the intervention and all follow-up assessments at six weeks, three months, and six months after the completion of the intervention. A total of 60 of the dropouts did not complete all assessments, 48 of them guit, and two of them passed away during the period of the study. We performed attrition analysis to determine whether there were any significant differences between participants, who completed all intervention and assessment points and participants who dropped out in outcome measures, group assignment and co-variates we measured at the baseline assessment. Bivariate analyses, either t-tests or chi-square tests, were conducted and the results are shown in Table 1. As can be seen in the table, there were no significant differences between the remaining participants and those who dropped out in regard to the outcome measures, group assignments, and co-variates we measured at the baseline assessment. Therefore, no further multivariate data analyses were conducted in regard to attrition analysis.
- 4.2 Table 1 also shows the characteristics of our sample. Participants were, on average, 70 years of age (SD = 6.9, range = 50-88 years) and reported having participated in 66 minutes of voluntary work in the past month at the baseline assessment. Most of them were women (81%) and about of half of them had a secondary school education and above. About 16% of our participants reported poor self-rated health and 1.33 medical conditions at baseline.

Table 1. Descriptive statistics of the remaining participants and those who dropped out

(N = 384)

(11 - 304)		1	,
	Remaining	Dropouts	Statistics
	participants	(n = 120)	
	(n = 264)		
	Mear	n (SD)	t-test
Outcome measures			
Regular monthly volunteer minutes	57.39 (417.69)	11.00 (87.10)	1.48
Irregular monthly volunteer minutes	8.30 (48.41)	23.00 (143.35)	-1.20
Total monthly volunteer minutes	65.68 (419.35)	34.00 (168.41)	-0.80
Group Assignment	%	%	Chi-square
Experimental group	50.00%	50.83%	0.02
Control group	50.00%	49.17%	
Co-variates			
Gender	%	%	Chi-square
Male	18.94%	19.17%	0.003
Female	81.06%	80.83%	t-test
Age	69.95 (6.90)	70.99 (7.89)	1.31
Education	%	%	Chi-square
Less than secondary school	53.03%	53.33%	0.003
Secondary school and above	46.97%	46.67%	
Poor self-rated health	16.29%	16.29%	2.72
			t-test
Number of chronic illnesses	1.33 (1.29)	1.48 (1.32)	1.02

Random Group Assignment

4.3 Next, we evaluated whether or not our random group assignment was successful by examining differences in the outcome measures and co-variates at the baseline assessment. A bivariate data analysis was performed on those variables and the findings of this analysis are reported in Table 2. Table 2 shows that there were no significant differences in outcome measures and co-variates at the baseline assessment between the experimental group and the control group. In other words, our random group assignment was successful.

Table 2. Descriptive statistics of the experimental and control groups (N = 264)

Tuble 2: Descriptive statistics of the expen			17
	Control group	Experimental	
	(n = 132)	group	
		(n = 132)	
			Statistics
Outcome measures	Mean	(SD)	t-test
Regular monthly volunteer minutes	48.98 (475.91)	65.80 (351.61)	-0.33
Irregular monthly volunteer minutes	10.00 (59.39)	6.59 (34.24)	0.57
Total monthly volunteer minutes	58.98 (478.57)	72.39 (352.04)	-0.26
Co-variates			
Gender	%		Chi-square
Male	15.15%	22.73%	2.47
Female	84.85%	77.27%	
Age	70.74 (6.76)	69.15 (6.98)	1.88
Education	9	%	Chi-square
Less than secondary school	58.33%	47.73%	2.98
Secondary school and above	41.67%	52.27%	
Poor self-rated health	16.67%	15.91%	0.03
			t-test
Number of chronic illnesses	1.43 (1.23)	1.23 (1.35)	1.29

Testing for Main Effects

- Raw data were inspected for outliers, which were truncated to three standard deviations above the respective mean per measurement point in time (two outliers at baseline were truncated to 1,324 minutes; seven outliers at six weeks were truncated to 1,784 minutes; four outliers at three months were truncated to 2,780 minutes; six outliers at six months were truncated to 2,348 minutes). Table 3 presents the key outcome measures for the experimental and control groups at the baseline, six-week, three-month, and six-month assessments. As can be seen in Table 3 and Figure 1, the experimental group increased in manifest volunteering minutes on average by 238 minutes from baseline to six weeks post-test, and increased by another 94 minutes and 16 minutes, respectively, at the three-month and six-month follow-ups. The control group slightly increased their volunteering minutes from baseline to the six-week and three-month follow-ups by 54 minutes and 110 minutes, respectively, but these numbers decreased again by 63 minutes at the six-month follow-up.
- 4.5 The conditional latent change model fit the data as well: $\chi^2(2) = 3.37$, p = 0.18, RMSEA = 0.05, CFI = 0.99, SRMR = 0.01. The group variables did not significantly predict the intercept at baseline ($\beta = 0.10$, SE = 0.08, p = 0.25), indicating that both groups had similar levels of volunteering minutes at this point. The latent change variable from baseline to six weeks post-test was significantly associated with being in the experimental group ($\beta = 0.21$, SE = 0.06, p = 0.001), indicating a steeper increase in monthly volunteering minutes from baseline to six weeks post-test in the experimental group (see Figure 2). Latent changes from baseline to the three-month and from baseline to the six-month

follow-up were also significantly predicted by the experimental condition (three months: β = 0.13, SE = 0.06, p = 0.04; six months: β = 0.23, SE = 0.06, p < 0.001). Only the first change (baseline to six weeks post-test) was significantly predicted by the sex and age control variables: Men (β = -0.13, SE = 0.06, p =0.04) and younger participants initially increased their volunteering more (β = -0.15, SE = 0.07, p = 0.03). The explained variance by group condition and control variables in the volunteering change from baseline to six weeks post-test was R^2 = 0.11; from baseline to three-month follow-up, R^2 = 0.05; and from baseline to six-month follow-up, R^2 = 0.09.

4.6 The percentage of non-volunteers (reporting o minutes of voluntary work per week) in the experimental group reduced the most from baseline to six weeks post-test, from 88.6% to 55.3%, and further decreased to 50.8% at the three-month follow-up and to 43.9% at the six-month follow-up. The percentage of non-volunteers in the control group decreased only mildly, from 93.9% at baseline to 82.6% at six weeks post-test, to 75% at the three-month follow-up; this increased again slightly to 77.3% at the six-month follow-up.

Table 3. Manifest means (M) and standard deviations (SD) of monthly minutes of volunteering by time and group.

	Baseline (pre-test)	Six weeks post-test	Three-month follow-up	Six-month follow-up
		Me	ean <i>(SD)</i>	
Experimental group	55.14	293.48	387.51	404.07
	(201.47)	(482.16)	(614.28)	(590.91)
Control group	28.09	82.61	192.65	129.15
	(150.06)	(255.85)	(499.54)	(349.43)

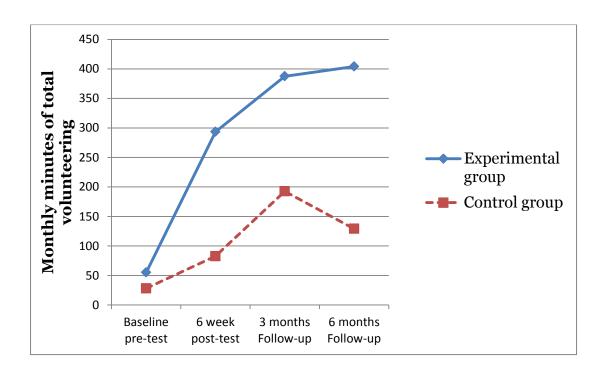


Figure 2. Manifest means of monthly volunteering minutes by time and group.

Testing for mediators of the intervention effect

4.7 Table 4 shows a description of the VIF subscale scores at the baseline, six-week, three-month, and six-month assessments. As can be seen in Table 4, there were few changes in all VIF subscale scores across the four assessments over a period of more than six months in both the experimental and control groups. No significant difference was found across time in any of the six VIF subscales when we performed ANOVAs in the experimental and control groups.

Table 4. Manifest means (M) and standard deviations (SD) of VFI subscale scores by time and group.

VFI subscale scores	Baseline (pre-test)	Six weeks post-test	Three-month follow-up	Six-month follow-up
Value	Q		ean (SD)	<u>.</u>
Experimental group	5.36 (0.90)	5.32 (0.82)	5.27 (0.72)	5.43 (0.69)
Control group	5.34 (0.99)	5.40 (0.82)	5.37 (0.82)	5.30 (0.88)
Understanding				
Experimental group	5.23 (1.02)	5.06 (1.04)	4.98 (0.84)	5.19 (0.78)
Control group	5.15 (1.19)	5.23 (1.06)	4.93 (1.09)	5.10 (0.90)
Protection				
Experimental group	4.67 (1.32)	4.68 (1.25)	4.78 (1.14)	4.94 (1.12)
Control group	4.74 (1.33)	4.97 (1.21)	4.92 (1.24)	4.97 (1.19)
Enhancement				
Experimental group	4.97 (1.29)	5.06 (1.20)	4.93 (1.10)	5.14 (1.05)
Control group	5.06 (1.29)	5.26 (1.12)	5.09 (1.23)	5.09 (1.11)
Social				
Experimental group	4.36 (1.48)	4.53 (1.39)	4.47 (1.46)	4.80 (1.36)
Control group	4.40 (1.46)	4.47 (1.53)	4.61 (1.33)	4.47 (1.36)
Make friends				
Experimental group	5.77 (1.08)	5.74 (1.12)	5.95 (0.78)	5.90 (0.92)
Control group	5.62 (1.30)	5.79 (1.15)	5.61 (1.13)	5.76 (1.01)

^{4.8} The descriptive statistics of the potential mediators (perceived benefits of voluntary work, intention to volunteer, self-efficacy in regard to volunteerism, action planning, self-monitoring, generativity concern, and sense of community) are shown in Table 5. Similar to the subscales of VIF, there were only slight

changes in the perceived benefits of voluntary work, intention to volunteer, and sense of community over the period of six months across the four data collection points.

Table 5. Manifest means (M) and standard deviations (SD) of other potential mediators by time and group.

	Baseline (pre-test)	Six weeks post-test	Three-month follow-up	Six-month follow-up
Perceived benefits of voluntary work	(pre test)		n (SD)	ionow up
Experimental group	28.63 (4.00)	28.75 (3.55)	28.37 (3.25)	28.78 (3.12)
Control group	28.13 (4.76)	28.82 (3.68)	28.42 (3.70)	28.94 (3.93)
Intention to volunteer				
Experimental group	10.50 (2.73)	10.84 (2.61)	11.02 (2.61)	10.89 (3.09)
Control group	10.14 (3.37)	10.36 (3.57)	10.71 (4.03)	10.56 (3.84)
Self-efficacy on volunteerism				
Experimental group	7.78 (2.77)	7.12 (2.62)	6.99 (2.52)	6.79 (2.79)
Control group	8.10 (3.05)	8.00 (3.40)	7.45 (3.40)	7.25 (3.47)
Action planning				
Experimental group	9.26 (5.88)	11.24 (6.46)	10.69 (6.65)	12.13 (7.13)
Control group	8.77 (5.29)	8.64 (5.33)	8.78 (5.70)	10.32 (6.60)
Self-monitoring				
Experimental group	3.40 (2.50)	4.77 (3.38)	4.23 (3.07)	4.98 (3.44)
Control group	3.36 (1.88)	3.69 (2.24)	4.08 (2.69)	4.38 (2.84)
Generativity concern				
Experimental group	27.77 (8.29)	28.20 (8.61)	28.05 (9.17)	29.15 (8.11)
Control group	25.95 (9.24)	25.95 (8.12)	27.81 (8.84)	27.30 (7.99)
Sense of community				
Experimental group	34.14 (3.89)	33.61 (3.47)	33.72 (3.19)	34.16 (3.78)
Control group	34.09 (3.54)	34.58 (3.20)	34.35 (3.49)	34.87 (3.76)

4.9 Comparatively, the changes in self-efficacy in regard to volunteerism, action planning, and self-monitoring of volunteering activity, as well as generativity concerns were greater than the other mediators listed in Table 5. As can be seen in Figure 3, the self-efficacy on volunteerism decreased gradually from the baseline to the six-month follow-up assessment in both experimental and control groups.

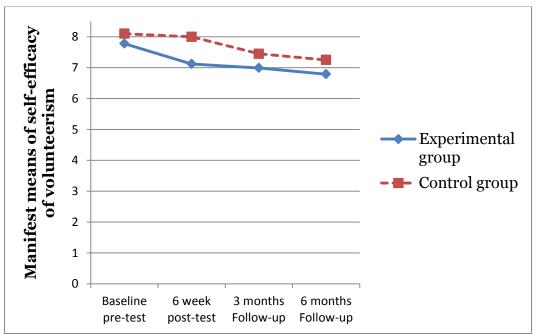


Figure 3. Manifest means of self-efficacy on volunteerism scale.

4.10 Figures 4 and 5 show changes in action planning and the self-monitoring of voluntary work over the period of six months. As can be seen in these figures, both action planning and the self-monitoring of volunteering activity gradually increased from the baseline assessment to the six-month follow-up measurement, but the increase in the experimental group was greater than that in the control group.

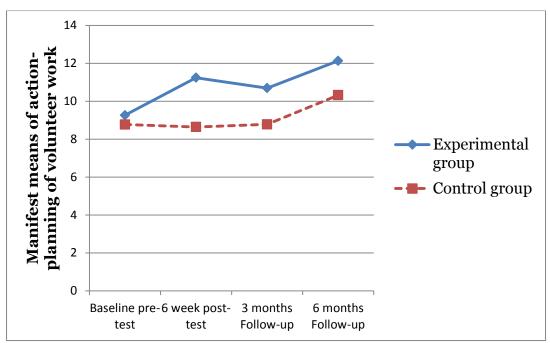


Figure 4. Manifest means of action-planning of voluntary work.

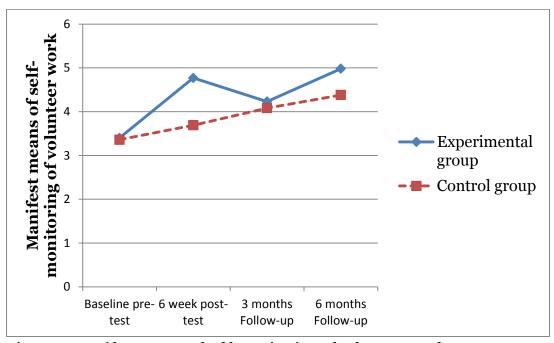


Figure 5. Manifest means of self-monitoring of voluntary work.

4.11 The descriptive statistics regarding generativity concern are shown in Figure 6. As can be seen in this figure, generativity concern was greater for the experimental group than for the control group at the baseline measurement. Moreover, during the course of the six-month follow-up, generativity concern increased slightly in both groups (see Figure 6).

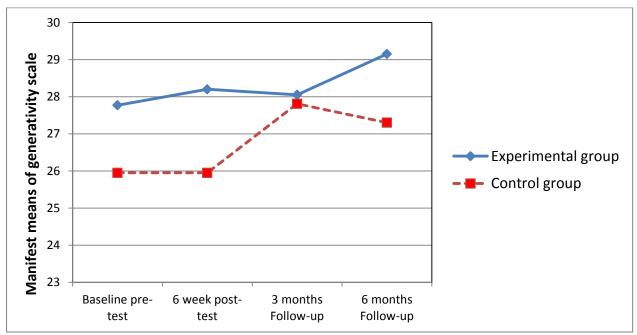


Figure 6. Manifest means of generativity scale.

- 4.12 Manifest path analyses with indirect effects were specified and tested with 95% bias-corrected confidence intervals resulting from 1000 bootstraps in Mplus 8. Respective mediators (VIF subscales, intention, perceived benefits, self-efficacy, planning, self-monitoring, generativity, and sense of community) at six weeks and three months, as well as total volunteering minutes per week at the six-month follow-up (outcome), were regressed on their respective baseline scores and on the age, sex, marital status, education, subjective health rating, and number of chronic conditions control variables, as well as on the group condition.
- 4.13 In order to find the active ingredients of the complex intervention, combining several behavior change techniques, possible mediating variables were assessed and tested as explanatory variables for the intervention effect. Only planning showed a consistent mediation effect. Group condition had a significant indirect effect via planning at six weeks (β = 0.044, 95% CI (0.012, 0.092)) and at three months (β = 0.030, 95% CI (0.001, 0.078)) on volunteering minutes at six months (see Table 7 and Figures 7 and 8). The experimental group hence showed a steeper increase in action planning at six weeks and at three months, compared with their baseline planning scores, which translated into more volunteering at six months, after taking the aforementioned control variables into account.

Table 6. Summary of mediation models predicting volunteering minutes per week at the six-month follow-up with group condition via the six subscales of the VIF as expected mediators at six weeks and three months

Mediating variable	Indirect effect	Lower BC 95% C	I Higher BC 95% CI_
VIF social motive at six weeks	0.004	-0.005	0.019
VIF social motive at three months	-0.005	-0.022	0.007
VIF value motive at six weeks	-0.004	-0.021	0.010
VIF value motive at three months	-0.001	-0.016	0.004
VIF enhancement motive at six weeks	-0.004	-0.020	0.002
VIF enhancement motive at three months	-0.003	-0.020	0.005
VIF protection motive at six weeks	0.005	-0.002	0.021
VIF protection motive at three months	0.001	-0.003	0.019
VIF understanding motive at six weeks	-0.003	-0.017	0.003
VIF understanding motive at three months	0.001	-0.003	0.010
VIF friend motive at six weeks	0.008	-0.006	0.030
VIF friend motive at three months	-0.002	-0.017	0.006

Note. Reported are standardised bootstrapped regression coefficients for indirect effects; n = 264; * significant point estimate according to 95% bias corrected (BC) bootstrapped confidence interval (CI).

- 4.14 Self-monitoring (β = 0.052, 95% CI (0.017, 0.106)) also showed an indirect mediation effect from group condition to volunteering; however, this was only true if the six-week measures were tested as mediators. At the three-month follow-up, both groups had similar self-monitoring scores again, so the three-month self-monitoring scores did not mediate the intervention effect.
- 4.15 Self-efficacy decreased in both groups, with less steep decreases in the experimental group at six weeks (β = .015, 95% CI (0.001, 0.047) but not at three months, mediating the group condition on volunteering effect at six months.
- 4.16 Action planning can be interpreted as the only active ingredient of the intervention. More social-cognitive variables should be tested in future research, which might explain the cognition behind this and maybe also the emotions that change in regard to the motivation to volunteer in a volunteering intervention.

Table 7. Summary of mediation models predicting volunteering minutes per week at the six-month follow-up with group condition via expected mediators at six weeks and three months

Mediating variable	Indirect effect	Lower BC 95% CI	Higher BC 95% CI
Intentions at six weeks	0.011	-0.005	0.031
Intentions at three months	0.003	-0.019	0.025
Perceived benefits at six weeks	0.000	-0.006	0.007
Perceived benefits at three months	0.002	-0.017	0.019
Self-efficacy at six weeks	0.015*	0.002	0.041
Self-efficacy at three months	0.007	-0.015	0.029
Action planning at six weeks	0.044*	0.015	0.083
Action planning at three months	0.030*	0.004	0.066
Self-monitoring at six weeks	0.052*	0.021	0.099
Self-monitoring at three months	-0.005	-0.039	0.027
Generativity at six weeks	0.008*	0.000	0.027
Generativity at three months	-0.009	-0.028	0.002
Sense of community at six weeks	-0.005	-0.023	0.005
Sense of community at three months	-0.002	-0.016	0.006

Note. Reported are standardised bootstrapped regression coefficients for indirect effects; n = 264; * significant point estimate according to 95% bias corrected (BC) bootstrapped confidence interval (CI).

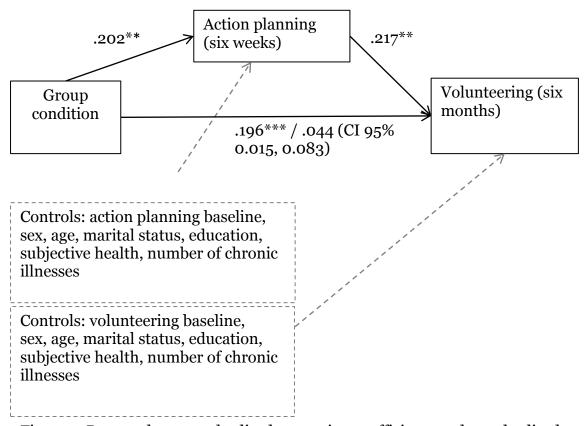


Figure 7. Reported are standardised regression coefficients and standardised indirect effects with bootstrapped 95% confidence intervals; * p < .05; ** p < .01; *** p < .001.

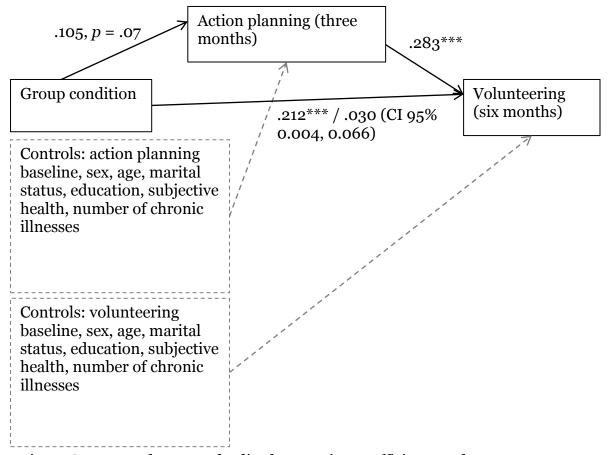


Figure 8. Reported are standardised regression coefficients and standardised indirect effects with bootstrapped 95% confidence intervals; * p < .05; ** p < .01; *** p < .001.

Discussion

4.17 Overall, the intervention to increase volunteering in older adults in Hong Kong showed some effects on monthly volunteer minutes. In comparison to the first version of this intervention (Warner et al., 2014), which was based on the health action process approach, this advanced intervention was implemented not in a short half-day intervention session, but in four 1-hour sessions that took place across four consecutive weeks. This improved the intervention, which subsequently resulted in greater and longer lasting effects that could consistently be shown at six-week, three-month and six-month follow-ups. However, it should be noted that the volunteering time was still quite low, compared with results in Western countries (Warner et al., 2014).

Subgroups

4.18 Male and younger participants initially increased their volunteering more than female and older ones. This could mean that the intervention differentially affected these subgroups, or that these subgroups started off with lower levels of

volunteering in the beginning and had more "room to improve". More developed analyses of the data in the future will test for possible moderators of this intervention effect, investigating whether or not parts of the intervention were better received by some subgroups of the study population, such as younger participants and male participants. These subgroup analyses may reveal whether or not the intervention can be further improved by integrating more role models of different genders or ages, or whether or not the intervention could even be tailored to the needs and interests of specific subgroups. Tailored approaches have been proven to work better than one-size-fits-all approaches in health and psychological interventions and would therefore be a promising direction in which to further develop this already successful intervention (Noar, Benac, & Harris, 2007).

Mediators

- 4.19 With a sample of fairly motivated older adults who signed up for the volunteering intervention, it is very hard to increase intentions any further. This can be seen by the high baseline intention levels of both groups, which still increased over time, but might not have increased enough to detect a significant effect due to ceiling effects in both groups. If participants are already motivated, they enter a volitional phase, according to the health action process approach. In this phase, they work on how they can translate their intentions into behavior, which might be why they profited the most from making concrete action plans.
- 4.20 Action planning can be interpreted as the only active ingredient of the intervention, as it was a significant mediator at both the six-week and the three-month follow-ups. Action planning in the form of implementation intentions has been shown to be a very powerful behavior change technique, especially for older adults; hence, our study endorses implementation intentions in the context of volunteering as well (Gollwitzer & Sheeran, 2006).
- Even though self-efficacy at six weeks served as a mediator in the relationship 4.21 between group condition and volunteering at six months, the three-month self-efficacy scores did not mediate the intervention effect. An inspection of the development of self-efficacy in regard to volunteering in both groups clearly shows that self-efficacy decreases in both groups. Decreases in self-efficacy are quite common following an intervention, as participants usually overestimate their abilities to adopt new behaviors and it is only when they first try to initiate and maintain the new behavior that they realize that the targeted behavior is more difficult than they thought and more barriers in daily life arise than anticipated at baseline (McAuley et al., 2011; Staring & Breteler, 2004). For future interventions, this means that the role model video clip that was shown to participants in order to increase their self-efficacy should mention how hard it can be to changes one's behavior, in order to prepare participants for barriers they might meet during the process of doing so. This might help them to experience only an initial drop in self-efficacy (from before to directly after the intervention), but inoculate their confidence in regard to being able to overcome barriers to volunteering while making volunteering a new habit.

4.22 Generativity and sense of community did not change considerably as a result of the intervention. As these two areas might develop over the course of taking up a volunteer position and maintaining it, it may be that these should better be specified as long-term outcomes of taking up volunteering than mediators in the intervention-volunteering relationship.

Theoretical Implications

- 4.23 In the background of recent definitions of volunteering as being a possible healthy behavior for older adults (Ziegelman & Knoll, 2015), this study chose the health action process approach (HAPA) as a theoretical basis. Intervention material was developed along the constructs of the HAPA, with a particular focus on positive outcome expectancies, intentions, self-efficacy, and planning. As only planning emerged as a consistent and significant mediator of the intervention effect and neither perceived benefits, nor intentions, nor self-efficacy increased considerably after the intervention, this study does not serve as support for the HAPA's utility in volunteering research.
- The behavior change techniques used in this intervention can, however, be seen as 4.24 very promising as, overall, they resulted in a meaningful intervention effect. Future studies should build on this knowledge and establish a theoretical model that can be used to inform intervention research in regard to volunteering, without having to rely on theoretical models developed for health behavior. For example, the construct of risk perception suggested within the HAPA model does not translate well to the context of volunteering, nor as an aspect to be investigated in longitudinal research, nor for interventions, which is why we removed this construct from the intervention. Promising constructs for a theoretical model that predicts volunteering and derives behavior change strategies for future interventions for older adults might address self-regulatory constructs, such as self-monitoring. Even tough self-monitoring did not emerge as a consistent mediator in our study; it significantly increased at six-weeks post-test in the experimental group, compared with the control group. A diary for keeping track of one's volunteering activity hence seemed to support participants, especially in the initial phase of adopting the new volunteering activities.
- 4.25 One way to improve a volunteering behavior change model would be to integrate knowledge from life-span theories, such as socio-emotional selectivity theory (SST; Carstensen, 1992; Carstensen & Mikels, 2005). According to SST, getting older is accompanied by a shift toward positive affect, which leads to a stricter selection of social network members who increase the probability of experiencing positive affect. This positivity effect is even evident in information processing and memory processes. Older adults process and remember positive information relatively better than negative information, compared with younger adults. Along this line, interventions that frame messages in a positive way (highlighting the benefits instead of promising a reduction in risks) were found to be more effective in older than in younger adults in regard to increasing walking behavior (Notthoff

& Carstensen, 2014). As our intervention highlighted various positive effects of volunteering to society but also to the volunteers themselves, it was tailored well to the affective preferences of older adults and therefore increased volunteering. However, the mechanisms of perceiving more benefits after the intervention could not be detected in our mediation analyses, which might be due to the fact that the participants were quite motivated already.

Future Studies

- 4.26 Even though the time frame of the current study was longer than the previous one conducted by Warner and her colleagues (Warner et al., 2014), the duration was still not long. To evaluate whether or not the intervention effects can last for a longer period of time, we plan to create more follow-up measurements for participants in future studies. The proposed future studies will examine the long-term impact of the intervention and under what circumstances participants make a sustained commitment to volunteering in their later lives. . Observing these promising intervention effects over longer periods of time in future RCTs is of particular importance as the advantages of volunteering for volunteers' psychological as well as physical health and ultimately longevity can be expected to only show after they have volunteered for longer periods of time (Okun et al., 2013).
- 4.27 Although the intervention was effective on average, there were also participants in the experimental group, who stayed non-volunteers throughout the entire study period. Further analyses will elaborate on the reasons for not taking up a volunteer position in participants that were in the experimental group. This might be due to personal life circumstances such as health problems or other important duties (e.g., caring for family members). Or **some older adults needed more time**, **to find the right volunteering organization with tasks that fulfil their interests and fit their skills, meaning that they might have taken up volunteering after the 6 month follow-up period.** For other participants in the intervention group, the behavior change techniques might not have been convincing enough. So future research is needed, to find out, what reasons keep older adults from volunteering despite intervention and whether further behavior change techniques would change their minds.
- 4.28 Given the fact that the monthly volunteering minutes obtained in our experimental group are still comparatively low and the effect size of the treatment effect small, more research is needed to investigate whether or not the deliberate enhancement of action planning in regard to engagement in voluntary work could result in even larger and longer intervention impacts on volunteerism. To investigate even more effective action plans, our future research will build upon first studies from the physical activity domain, in which the content of successful action plans was examined by means of qualitative content analyses in order to find those plan characteristics that should be taught to participants to make their plans even more likely to become reality

(Fleig et al., 2017; Keller et al., 2017). We acknowledge that not all mediators identified in this study exert causal effects on voluntary work engagements, and future randomized clinical trials will need to be performed by comparing the original intervention with the intervention in which the identified mediator (action planning for volunteerism) is enhanced. The benefits of uncovering causal mediators are substantial because they can inform the development of future interventions in regard to the way in which inactive or redundant components can be discarded. In this way, the development of interventions with large effect sizes and high levels of cost-effectiveness is promoted.

- 4.29 At 6 month follow-up, the experimental group did on average 400 minutes of volunteer work per months, meaning that they engaged in 100 minutes per week. This is not as much as the original version of this intervention in Germany achieved, where 200 minutes per week were observed at 6 weeks follow-up in the experimental group. The 100 minutes per week observed in our current study can however be considered a very healthy amount of volunteering, as previous research has shown that volunteering levels of 50 to 160 minutes per week can be rated as optimal with higher amounts resulting in negative health consequences for older adults (Luoh & Herzog, 2002; Musick et al., 1999; Van Willigen, 2000).
- 4.30 Because this study recruited participants from community elderly centers, the results may not be generalizable to less healthy and less educated older adults who do not attend community elderly centers. Future studies that include older individuals with poor health or less educational attainment should be conducted, so as to examine the effectiveness of the intervention in this higher risk aged population. However, it is important that possible negative consequences of volunteering activities are communicated to these older people, so that unnecessary harmful effects of excessive voluntary work can be avoided (Warburton & Peel, 2008). In other words, the intervention must be extended to and tested in more diverse aged populations.
- The fact that these four short one-hour face-to-face group intervention sessions 4.31 produced a significant increase in monthly volunteering minutes six months after the completion of the intervention is encouraging and promising. The group setting may be one of reasons why this intervention worked, because older people can thereby support each other by exchanging their volunteering plans and experiences in the process of the initiation and maintenance of volunteerism (Haski-Leventhal & Cnaan, 2009). However, it is also time-consuming to form a group and arrange group meetings. Future studies must be undertaken to deliver the same intervention in individual settings and, to increase cost-effectiveness, intervention could the be computerized, personalized, and designed to be delivered over the internet through desktop computers, iPads, or even smartphones. These future studies should investigate whether or not different settings and different delivery modes of the same intervention have the same or even greater positive impacts on voluntary work among older adults.

- 4.32 One limitation of the current study is that, although we examined 13 mediators, this is not a comprehensive list. Further social-cognitive variables should be tested in future research, which might explain the cognitions and maybe also the emotions that change in regard to the motivation to volunteer in a volunteering intervention. These aspects should be highlighted in the section on theoretical implications.
- 4.33 A strength of this intervention is that we did not chose a passive control group (like a waiting list group) to increase the chances of an intervention effect, but compared the volunteering intervention group to an active control group that had comparable intervention sessions targeted at physical activity instead of volunteering. This way we can rule out that the mere group setting with intervention is effective to increase volunteering, and can confirm that the actual content of the intervention with its theoretically selected behavior change techniques to increase volunteering especially among older adults was the active ingredient.

Chapter Five: Policy Implication and Recommendations

Overall Findings

- An aging population presents not only challenges but also opportunities to society. As stated in its Population Policy: Strategies and Initiatives, the Hong Kong Special Administrative Region (SAR) government proposes that the best efforts should be made to promote active aging, in order to release and harness the social capital of older adults (Chief Secretary for Administration's Office, 2015). Future generations of older people will thereby be healthier, better connected to society, and better educated than the current cohort. Consequently, these factors will open up new economic and social opportunities for this group, as well as for society as a whole. Productive aging emphasizes the way in which older people are capable of continuously making economic contributions to society through work, as well as informal and formal volunteering. These engagements can lead to multiple positive consequences for service recipients, volunteers themselves, and society as a whole.
- The current study aimed to enable and encourage community-dwelling older 5.2 adults to engage in voluntary work in Hong Kong through a relatively short, social-cognitive, face-to-face group intervention with a randomized experiment design. We compared the volunteering engagement of the older adults assigned to the experiment group and those in the active control group. Our findings show that the amount of time devoted to volunteerism increased significantly more for the participants receiving our intervention than for those who didn't receive it during follow-up assessments that took place six weeks, three months, and six months after the completion of the intervention. Moreover, the percentage of those who did not engage in volunteer activities reduced significantly from 89% before the implementation of the intervention to 44% six months after receiving the intervention. Our results show that increasing the engagement in volunteerism in Hong Kong for older people is possible and feasible through a comparatively short-term one-month intervention consisting of four sessions. This approach is consistent with the population policy advocated by the Population Policy Task Force. These findings provide critical insights into promoting productive aging by engaging older people in voluntary work.

Medium-Term Impact

Compared with similar previous studies related to volunteerism in old age (Warner et al., 2014; Pillemer et al., 2017), this study has a number of strengths. One of the strengths of this research is the way in which we examined the medium-term impacts of the intervention. We demonstrated that the impact of the intervention lasts for six months after its completion. In the original study conducted by Warner and her colleagues (Warner et al., 2014), only the short-term effects of the intervention, six weeks after its completion, were examined. Thus, we have successfully demonstrated the medium-term impact of this social-cognitive theory-based intervention on volunteering activities among Hong Kong older people.

Mediators and Underlying Mechanisms

Another advancement made by our study is the way in which we investigate 5.4 the mechanisms that lead to the initiation and maintenance of volunteering via mediation analyses. Our findings unravel the processes and action planning that mediate the impact of the intervention on volunteerism among older adults. Our results support the mediators, based on the health action process approach (Schwarzer, 2008), in which two phases are proposed in the process of behavioral change. In the volitional phase this model suggest action planning to be the most crucial mediator. For older people, the mediational analysis showed that the intervention increased the mediator (action planning for engagement in voluntary work) and, in turn, the increase in this mediator predicted the increase in volunteering activity time among older adults. This positive result confirms the assumption that action planning for engagement in voluntary work is important in the course of behavioral changes in the intervention process. Future interventions on volunteering can now build on our intervention material by focusing on teaching participants to make effective if-then plans as well as to use weekly planning schedules to be filled out for future volunteering activities during and also after the intervention period.

Policy Implications

- 5.5 There are several potential policy implications for volunteering programs designed for health promotion. First, volunteering can be a vehicle to attract and retain more and more diverse older adults than standard intervention programs. These older volunteers are the human capital resource pool for community development and enhancement. The successful implementation of the intervention demonstrates that the time and energy of Hong Kong older people can be leveraged to address labor shortage challenges. **The provision of a theory-based program is shown to be an effective means of promoting volunteerism in the Hong Kong aged population.** The program may help to overcome some of the barriers that prevent older people's engagement with volunteering activities.
- 5.6 Our study clearly demonstrates that it is an over-simplification to assume that the increase in older people in Hong Kong will automatically lead to a greater supply of older volunteers to meet the increasing needs of social and health services. Specialized efforts should be allocated to effectively tap into the new source of unpaid social and health services personnel; namely, active, healthy, experienced, and educated older individuals in Hong Kong. This is especially relevant in the context of a rapidly aging population with projected increasing demands for social and health services.
- 5.7 Second, the volunteering experiences can be intentionally designed to improve generalizable physical, cognitive, and social activity within simulating environments. With the success of the intervention we

tested in this project, we could attract and recruit older people to participate in voluntary work, such as the Experience Corps program, Retirees in Service to the Environment (RISE), and the Research of Productivity by Intergenerational Sympathy (REPRINTS) group. We have already prepared a proposal in which we plan to launch an intergenerational program like the EC program in Hong Kong, so as to examine the impact of volunteering activities on the psycho-social well-being, physical health, and cognitive functioning of community-dwelling older people in Hong Kong.

5.8 Third, the volunteering programs also represent an opportunity to invest in the promotion of health for older adults in a way that augments resources for other generations, such as children. This is potentially a model for a population-based approach to health promotion. In other words, health promotion in old age can be implemented in the form of a volunteering program for older people.

Policy Recommendations

- In this study, we have prepared materials, such as a PowerPoint presentation 5.9 of training materials, video clips, worksheets, and a training manual to deliver the intervention. Additionally, through our collaboration with aged care practitioners in the social and health care fields, we can provide training manuals and intervention protocols describing these intervention programs to practitioners, in order to further promote the implementation of our findings. Because participants in this study were recruited from community centers for the elderly and the whole intervention was also implemented in these centers, we already have a ready resource for the dissemination and subsequent development of the implementation of the intervention through knowledge transfer efforts. Because the social-cognitive theory-based intervention designed to increase engagement in voluntary work is effective, we recommend that the intervention we examined in this study is implemented territory-wide through community centers for the elderly operated by other NGOs. Funding could be allocated to NGOs operating the elderly centers or to other NGOs that promote the development of volunteerism in Hong Kong, such as the Agency for Volunteer Service (AVS) and Social Career. We also plan to solicit funding for knowledge transfer projects within the Hong Kong University of Education and other universities. such as the University of Hong Kong and the City University of Hong Kong, in order to launch this knowledge transfer initiative. We have already observed major challenges for health care and welfare services caused by the increase in the aging population in Hong Kong. As the proportion of older adults in the general population continues to rise, capturing this source of social capital, which could help those in need in the community, is of major importance.
- 5.10 In the current effort to promote volunteerism, the role of older adults should be emphasized by the Hong Kong SAR government. Specifically, we recommend that more programs related to promoting and facilitating the engagement of volunteerism among older people are funded in the Opportunity for the Elderly Project (OEP). Third, we recommend that sub-committees that promote volunteerism

among older adults are formed under the Steering Committee on Promotion of Volunteer Service in the Volunteer Movement.

- 5.11 Similarly, the important role older people play in volunteerism should be highlighted in the development of volunteerism supported by NGOs such as the Agency for Volunteer Service (AVS) and Social Career. Fourth, we recommend that a special task force is formed to promote and encourage volunteering activities in aged populations in NGOs that promote voluntary work.
- Our findings indicate that short-term or irregular volunteering is one of the 5.12 most appropriate forms of involvement in volunteering activities for older people, even those in the active control group. Therefore, we recommend that short-term volunteering is promoted in aged populations. Recruitment strategies related to short-term or irregular volunteering for older people in Hong Kong should be initiated and evaluated within local contexts. This short-term volunteering could be promoted by establishing communication links with volunteering organizations, to encourage short-term volunteering in tandem with the communication strategies developed. Moreover, irregular volunteering is particularly suitable for emergency recovery, so information related to short-term volunteering should be ready to be launched immediately in response to any emergency cases that arise due to natural and man-made disasters, via the internet and electronic news media, coupled with a dedicated telephone number or website. Institutional-level responses could enhance the participation of older volunteers and retain existing volunteers by offering flexible and short-term or irregular volunteering opportunities. This provision of volunteering opportunities is an effective means to promote underrepresented groups who may have fewer resources and who are more likely to shoulder greater family obligations, and those with health problems.
- 5.13 When we were implementing our intervention in community elderly centers, we discovered that a good collaborative model is formed when elderly service units (the source of volunteers) and volunteering promotion organizations (experts in training volunteers) can work together to encourage older adults to volunteer. As a result, we recommend that different organizations work with each other to recruit, train, and retain older adults in regard to voluntary work. More collaborative work with elderly service units and volunteering organizations, such as the Agency for Volunteer Service and Social Career, need to recruit, train, and retain older people through joint training programs and referral services.
- When we were searching for volunteering opportunities for our participants, 5.14 we found that training and volunteering opportunities are currently provided website Volunteer of the (https://www.volunteering-hk.org/tc/servopp), the Agency for Volunteer (http://www.avs.org.hk/tc/stp Service and http://www.avs.org.hk/tc/referral), Volunteer Easy (https://easyvolunteer.hk/advanced-search and https://easyvolunteer.hk/vol-info-archive?actionType=view&redirect=/share

and appreciation%3FactionType%3Dview%26redirect%3D/advanced-searc h), and Social Career. It is time-consuming, painstaking, and confusing to search through all these sources. We recommend that the communication and information management systems are enhanced by establishing a one-stop of contact for the recruitment and training of volunteers.

Chapter Six. Details of the Public Dissemination Held

- 6.1. The findings of this research will be disseminated through three channels: a press conference, an international academic conference, and a newspaper op-ed.
- 6.2. First, the findings of this study will be disseminated to the general public through a press conference, which will be held in July 2018.
- 6.3. A newspaper op-ed on the findings of this research will be published in August 2018.
- 6.4. Finally, our research team will present the findings of this project at an international conference: the 2019 Gerontological Society of America's Annual Scientific Meeting in November 2019.

Chapter Seven. Conclusion

- 7.1 In conclusion, our theory-based social-cognitive intervention appears to be an effective way to encourage Hong Kong Chinese community-dwelling older adults to engage in volunteering activities. The positive impacts of the intervention remained stable up to six months after the completion of the intervention. Additionally, our findings suggest that action planning for participation in volunteerism is a mediator in the link between the effect of the intervention and the outcome measure, the monthly volunteering minutes.
- 7.2 Due to these positive results, we strongly recommend that the intervention is implemented in all elderly centers so that participation in voluntary work among older adults in Hong Kong can be significantly increased in the coming few years. Nevertheless, more research is needed to investigate how to improve the intervention by developing a theory specifically for volunteering and technological support, which could result in even better and prolonged intervention effects on volunteerism in later life.

Appendix A. The list of the participating elderly centers Tung Wah Groups of Hospitals

District	Centre
Eastern	Fong Shu Chuen District Elderly Community Centre
Eastern	Wu Ki Lim Neighbourhood Elderly Centre
Southern	Wong Shiu Ching Centre for the Elderly
Kowloon City	Wong Cho Tong District Elderly Community Centre
Kwun Tong	Fong Shiu Yee Neighbourhood Elderly Centre
Kwun Tong	Pong Wing Shiu Neighbourhood Elderly Centre
Shatin	Fong Yun Wah Neighbourhood Elderly Centre
Shatin	Wilson T.S. Wang District Elderly Community Centre
Tsuen Wan	Mrs. Wang Li Ming Tzun Tsuen Wan Neighbourhood Elderly Centre

Hong Kong Sheng Kung Hui

District	Centre
Central and Western	H.K.S.K.H. Western District Elderly Community Centre
Kowloon City	S.K.H. Holy Carpenter Church District Elderly Community Centre
Kowloon City	
Wong Tai Sin	H.K.S.K.H. Lok Man Alice Kwok Integrated Service Centre
Wong Tai Sin	H.K.S.K.H. Chuk Yuen Canon Martin District Elderly Community Centre
Sai Kung	H.K.S.K.H. Wong Tai Sin District Elderly Community Centre
	H.K.S.K.H. Tseung Kwan O Aged Care Complex- Jockey Club District Elderly Community Centre cum Day Care Unit

Appendix B. Summary table of intervention protocol, training manual and intervention materials for the experimental group

Table of intervention protocol

	Experimental group	Active control group
Session1	 Facilitator introduced the research team, the goals of the study, schedule of sessions, follow-up questionnaire and financial incentive to the older participants. Ice breaking activity: Older participants introduced 	 Facilitator introduced the research team, the goals of the study, schedule of sessions, follow-up questionnaire and financial incentive to the older participants. Ice breaking activity: Older participants introduced
	themselves to each other in the group. 3. Facilitator introduced the meaning of retired life and discuss with the older participants.	themselves to each other in the group. 3 Facilitator introduced the meaning of retired life and discuss with the older participants.
	 4. Facilitator promoted the financial benefits came from volunteer activities, and encouraged older participants join volunteer works in the future. 5. Facilitator briefly concluded 	4 Facilitator promoted the disadvantages due to lack of physical activity, and encouraged older participants having physical exercise in the future.
	the content of the first session.	 5 Our older tutor would teach older participants to learn stretching exercises focus on upper limbs. 6 Facilitator briefly concluded the content of the first session.

Session2

- 1 Facilitator introduced the benefits of joining volunteer activities, such as expand social network and increase psychological health.
- 2 Facilitator asked older participants to join the game: 5 questions quiz about the knowledge of volunteer activities.
- 3 Facilitator discussed with the older participants about the statistics of volunteer activities mentioned in the quiz, in order to raise their interest to join volunteer works.
- Facilitator reminded older participants to reflect why they should join volunteer work.
- 5 Facilitator briefly concluded the content of the second session.

- 1 Facilitator asked older participants to join the game: 5 questions quiz about the knowledge of physical activities.
- 2 Facilitator encouraged the elderly found the interest to join physical activity.
- 3 Facilitator reminded older participants what should be aware during physical activity, such as warm up exercise.
- 4 Facilitator introduced the benefits of having physical activity, such as psychological happiness and physical health.
- 5 Our older tutor would teach older participants to learn stretching exercises focus on middle body.
- 6 Facilitator briefly concluded the content of the second session.

Session₃

- 1 A review of the first two sessions was conducted by facilitator.
- 2 Facilitator showed
 five-minute video clip in
 which two older volunteers
 were presented as role
 model, in order to prove
 that older participants can
 also join volunteer works.
- 3 Facilitator introduced different volunteer service target to the elderly, also

- 1 A review of the first two sessions was conducted by facilitator.
- 2 Facilitator showed five-minute video clip in which two elderly were having physical exercise, so they presented as role model, in order to prove that older participants can also join physical activities.
- 3 Facilitator introduced different type of physical

- different type of volunteer works. In order to let older participants choose what kind of volunteer works they would have interest to join.
- 4 Older participants were informed that they should identify their optimal level of joining volunteer work and they should not exceed this level to prevent burnout
- 5 Facilitator asked older participants set the goals related to volunteer work before the end of this session.

- exercise available for elderly. Also, different kinds of sport venue were introduced by facilitator.
- 4 Older participants were informed that they should identify their optimal level of having physical exercise and they should not exceed this level to prevent burnout.
- 5 Our older tutor would teach older participants to learn stretching exercise focus on lower limbs.
- 6 Facilitator asked older participants set the goals related to physical activities before the end of this session.

Session4

- 1 Facilitator asked older participants to recall what kind of skills or hobbies they were familiar with in young adulthood.Older participants were asked to if they could engage in volunteer work based on their past experience.
- 2 Older participants were asked to discuss their goals on volunteer works. Facilitator would discuss with them whether their goals were proper, effective, practical and plannable.
- 3 Older participants were

- 1 Facilitator asked older participants to recall what kind of physical activities they were familiar with in young adulthood. Older participants were asked to if they can re-engage these physical activities based on their past experience.
- 2 Older participants were asked to discuss their goals on physical activities. Facilitator would discuss with them whether their goals were proper, effective, practical and plannable.
- 3 Older participants were

- asked to complete the if-then implementation intentions in the worksheet. For example, if I saw my calendar, then I would be reminded to look for a volunteer engagement.
- 4 Older participants were asked to discuss about the tricks they can use on themselves, to make becoming active volunteers easy and the facilitator would lead the discussion among them.
- 5 Facilitator would deliver a handbook to each older participants, and asked them to make volunteering record on it, in order to help them to self-monitor their behavior
- 6 Facilitator briefly concluded the content of all sessions and end up the class.

- asked to complete the if-then implementation intentions in the worksheet. For example, if I saw my calendar, then I would be reminded to join physical activities.
- 4 Older participants were asked to discuss about the tricks they can use on themselves, in order to help them join physical activities actively, and the facilitator would lead the discussion among them.
- 5 Our older tutor would help older participants to review what stretching exercise they have learnt in the previous sessions.
- 6 Facilitator briefly concluded the content of all sessions and end up the class.

The training manual for the intervention group

研究:「豐盛退休」-

提升香港退休人士參與志願服務的程度:介入研究訓練課程

<u>目錄</u>

1.	關於	義務工作參與	
	i.	香港退休人士參與義務工作概況	p. 3 - 4
	ii.	長者參與義務工作的好處	p. 5 - 6
	iii.	參與義務工作的媒介	p. 7
2.	關於	是次研究	
	i.	研究概要、研究名稱、	p. 8 - 9
		研究目的、招募對象、	
		研究時間表等	
	ii.	介入長者的方法	p. 10
		參與義務工作的社會認知理論	
	iii.	計劃流程及指標	p. 11
	iv.	如何進行工作坊	p. 12 - 20
3.	參考	資料	p. 21

1. 關於義務工作參與

i. 香港退休人士參與義務工作概況

在香港活躍老化(Active aging)

因著較長的預期壽命和生育率下降,香港的人口將在未來三十年迅速老齡化。根據政府統計處 2015 年的<<香港人口推算 2015-2064>>,65 歲或以上的長者口比例預計將由 2015 年的 15%上升至 2064 年的接近 33%。老化人口不僅給我們的社會帶來挑戰,也給我們機會。正如「人口政策:策略和措施」所述,香港特別行政區政府提議應盡最大努力促進活躍老化,以釋放和利用長者的社會資本。這一說法尤其真實,因為未來一代的長者將更健康,更好地與社會聯繫,並受到更好的教育。因此,這些因素將為這個群體以及整個社會開闢新的經濟和社會機會。根據世界衛生組織,活躍老化是優化健康,參與和保障的機會的過程,以提升生活質素,當人們逐漸年老時(1)。要達至活躍老化,健康、參與和保障被提議為一個政策框架的三大支柱。活躍老化是指繼續參與社會,經濟,文化,精神/靈性和公民的事務以及勞動力市場。因此,長者被認為會透過正式和非正式的工作和義務活動,繼續對其家庭、朋友和社區作出貢獻。

義務工作的定義

義務工作可以正式或非正式地進行,或者兩者都是。根據國際勞工局(2011年),正式的義務工作或機構性組織的義務工作被定義為在一個組織中的沒有報酬的非強制性工作,或者是在沒有報酬下成為一個義務組織或的團體成員。非正式義務工作或直接義務工作包括向朋友、家庭成員或鄰居在沒有報酬下提供的非強制服務。我們的研究只關注正式的義務工作,因為那在最近的統合分析中顯示與較低的死亡率有關(2)。我們將義務工作定義為由個人提供,通過正式的機構/組織的任何服務,如非政府組織,以貢獻他們的時間和精力,而沒有金錢或物質的回報。

香港參與義務工作比率

根據 2015 年的政府統計處運用時間模式調查(3),本港約有 690,700 人士過去一年曾參與機構/團體的義務工作,佔全港所有 15 歲或以上人士的 11.4%。曾參與義務工作的 男士佔 38.3%,女士佔 61.7%。按年齡來說,15-24 歲人士參與義務工作的比率最高,達 20.6%,而 55-64 歲人士,和 65 歲及以上人士的相應比率則較低,分別為 8.9%和 5.5%。 65 歲及以上人士參與義務工作的比率由 2003 年的 3.6%上升至 2012 年的 5.5%,55-64 歲人士的比率也同樣上升。香港義務工作 2009 年調查(4)顯示,55 歲及以上人士不參與義務工作的最常見原因是「沒有時間」(66.6%),「年紀太大」(27.5%) 和「因身體問題不能做到」(15.7%)。 退休人士的情況也類似:沒有時間 (58%),年紀太大 (35.4%),因身體問題不能做到 (19.8%)。

在西方國家,長者參與義務工作的比率為四分之一到三分之一。例如,美國 65 歲及以上的長者中約有四分之一 (24.1%),而在加拿大和德國多於三分之一 (36.5%) 的長者參與義務工作。即是說,在香港,長者在義務工作方面的參與率明顯低於美國,德國和加拿大等其他國家。

當前努力

勞工及福利局和社會福利署提供財政資源予社會服務機構及地區組織,以推行「左鄰右里積極樂頤年計劃」和「老有所為活動計劃」,目的是維持香港退休人士活躍和具生產力

的生活。自 1998 年起,社會福利署推行「老有所為活動計劃」,以提高長者的價值感。 而在 2014-2015 財政年度總共資助了 276 項活動,例如健康研討會,手工藝課程。此外, 在 2008 年,勞工及福利局和安老事務委員會啟動了「左鄰右里積極樂頤年計劃」,以動 員長者為社區服務。自實施以來,總共資助了 230 個計劃。<<人口政策:策略和措施>> 公布,「左鄰右里積極樂頤年計劃」和「老有所為活動計劃」的資源將被合併,以鼓勵長者 積極參與社區事務,包括義務工作。即是說,儘管香港政府已努力,香港長者參與義務 工作的比率仍是偏低。因此,鼓勵更多的長者參與義務工作是重要的,特別是在老化的 環境下。

在 2012-13 年,德國進行了一項隨機對照實驗(5)於 280 個長者,測試基於理論的社會認知干預的影響,發現介入組的每星期參與義工分鐘在介入 6 個星期後增加得更多,比基線(在介入 5 個星期前),與兩個對照組(被動和主動介入) 相比較,顯示單次、面對面的小組會面能增加長者的義工參與。

ii. 長者參與義務工作的好處

身體及社會心理健康

縱向觀察性研究廣泛研究了長者參與義務工作相關的好處。簡而言之,參與義務工作通 過增加社會,身體和認知活動來增強心理社會,身體和認知功能(6)。

在社會心理的方面,參與義務工作者會:

- 減少抑鬱症狀,
- 更高程度的正面影響和快樂,
- 更大的生活滿意度,及
- 更強的控制力和更高的自尊

參與義務工作對長者身體的益處見於:

- 對健康的自我評價,
- 功能能力,
- 醫療狀況,如高血壓、臀部骨折,及
- 死亡率。

「經驗隊伍計劃」是第一個也是唯一在文獻出版的隨機對照試驗,其中驗證了長者參與義務工作的好處。簡言之,65歲及以上的長者被隨機分配到在公立小學工作的一組義工或一個等候名單對照組。義工每星期平均服務 15小時,推行活動,如支持從幼稚園到小學三年級的識字發展,支援圖書館的運作,通過解決難題和遊戲以教育兒童解決衝突,以及提高上學的出席率。通過經驗隊伍計劃參與義務工作顯示出不同方面的益處,包括:

- 减少抑鬱症狀,
- 增強傳承力,
- 增加社會網絡的大小,
- 减少功能障礙,
- 改進的 (自我報告的) 力量,
- 客觀測量的步行速度,及
- 改進的執行功能,語言學習和記憶。

在香港,退休後參與義務工作是與更高的自我效能,更高的生活滿意度和更少的心理困

擾正面相關。義務的家訪計劃對義工的心理健康有正面影響。此外,跨代活動中的義務工作也對跨代團結和社區的社會資本產生正面影響。

經濟效益

在美國,老年的義工參與者的經濟價值估計高達 190 億美元。

但在香港,長者參與義務工作的比率較低。根據香港大學 2009 年度的調查,過去十二個月參與義務工作的總時數是 8700 萬小時,佔本地生產總值的百分比是 0.34%。義務工作參與共貢獻了 55 億港元給香港社會。

iii. 參與義務工作的媒介

義務工作發展局

- o 非牟利機構,提供義工轉介服務
- o 為個別市民提供義務工作機會,因此接觸到不同的義工活動
- 並為需要義工協助的機構找尋合適人選,提供配對或介紹的服務
- 需要入會,個別市民可以成為一般會員(香港義工團),而機構如非牟利團體 則可以成為機構會員
- 另設有「專才義工網」,適合18歲以上具有專業技能人士加入,需經過面試, 義工隊是為非牟利機構及弱勢社群提供優質專業服務。現有服務隊包括:攝影、 家居維修、健康護理、理髮、社區導遊、社區共融及資訊科技等。最受退休人 士歡迎的為同心者探訪隊及綜藝隊。
- o 參與義務工作資料庫:

http://www.volunteerlink.net/index.php?tn=vs_info1&ncid=all&lang=tw 或 http://www.volunteering.org.hk

義工運動

- o 由社會福利署義務工作統籌課展開,協助有興趣的人士和團體推行義務工作。
- 社會福利署在本港 11 個地區成立義工服務分區辦事處,為各新成立或有興趣 成立義工隊的機構/團體提供協助。
- 查詢:2234-0100
- o 參與義務工作資料庫:

https://www.volunteering-hk.org/tc/swd_service_opportunities_advance_search/list

2. 關於是次研究

i. 研究概要

研究名稱 提升香港退休人士參與義工服務的程度: 介入研究
莊明蓮教授,香港城市大學應用社會科學系教授 樓瑋群博士,香港大學社會工作及社會行政學系副教授
樓瑋群博士,香港大學社會工作及社會行政學系副教授
李田園埔十,香港教育大學心理學系助理教授
1 国国内工,自己认有八十七五十九两五秋天
研究資金 中央政策組,公共政策研究資助計劃
研究目的 評估如何透過介入推動長者參與義務工作,並識別介入與結果測量之
間的連繫因素,以了解介入的影響機制
研究方法 透過進行隨機分配對照實驗(Randomized Controlled Trial),我們會比較
兩個同樣以社會認知理論為本的介入:實驗組(experimental group)是
鼓勵義務工作和對照組(control group)則是推動運動。研究將會在基線
(實行介入前一個月內),及完成介入後的3次跟進:第六星期,第三
個月,和第六個月以面對面,問卷形式評估自行報告的每週義工參與
時間(以分鐘計算)。我們估計需要約十間長者地區中心或長者鄰舍中
心參與這項研究。參與的中心會被隨機分配去實驗組或對照組,我們
希望每間中心能夠招募約36名長者參與這項研究。參與長者會在被
招募的中心進行介入活動及評估。
對象數目 360 名長者, 男女各約 180 人
招募對象 - 60 歲或以上
- 沒有嚴重肢體傷殘
- 沒有認知障礙或嚴重抑鬱
- 不是在全職或兼職工作
- 能閱讀與書寫簡單中文
- 在過去1年內沒有或甚少(全年少於4次)參與任何義務工作
介入內容
實驗組: 鼓勵義務工作(包括第1節:退休的意義;第2節:參與義務工作
的小測驗;第3節:參與義務工作的理念;第4節:從理念到行動)
對照組 : 推動體能活動, 節數與實驗組一樣
參與長者 完成介入活動及所有評估的長者,每位將會獲得面值港幣 200 元的起
現金鼓勵 市現金卷。
研究時間表 2016 年 12 月至 2017 年 3 月: 準備期及先導測試
2017年4月至2017年5月: 招募參與者
2017年6月至2018年2月: 介入及跟進
2018年3月至2018年5月:分析及撰寫報告

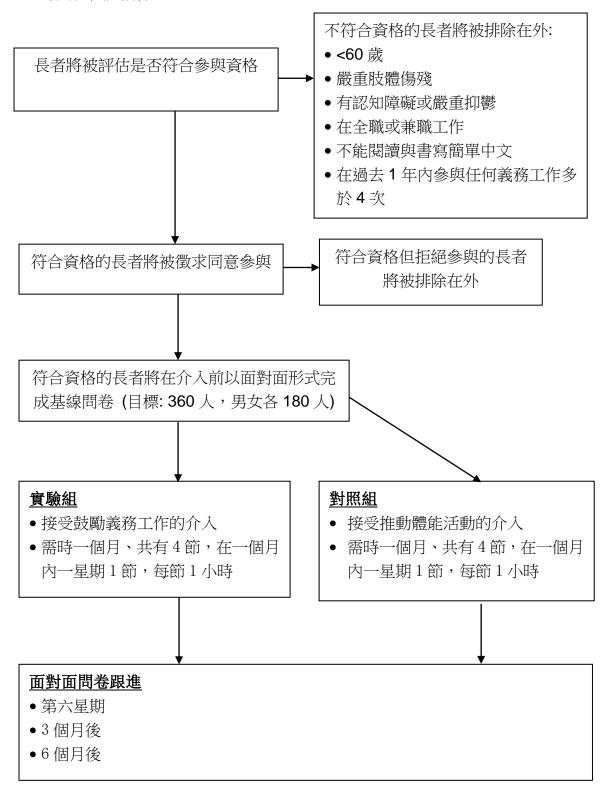
ii. 介入長者的方法

參與義務工作的社會認知理論 (Social-Cognitive Theories of Volunteering)

最近的研究表明,對義務工作的正面態度,參與義務工作的自我效能和社交支持,均與義務工作的參與直接正相關。這一觀點得到計劃行為理論的支持,也應用於參與義務工作(7)。換句話說,肯定義務工作之正面影響的人士表現更高的能力去實行義務工作,並獲得他們的重要他人 (significant others) 對他們的義務工作的批准和支持,而且更有可能被激勵做義工。雖然這些促進義務服務的因素已經在橫向和縱向調查中確立,但直到最近,因果關係還未被在採用實驗設計的研究被驗證出來。

雖然一定數目基於社會認知理論的參與義務工作的介入研究曾在青少年和 4 至 17 歲兒童的父母進行,在長者中卻只有一個基於社會認知理論的介入研究。在德國最近的一個研究中,長者被隨機分配到社會認知介入的組,基於健康行動過程法,目的在於促進參與義務工作,另主動對照組:介入在於鼓勵做運動,還有被動等待名單對照組。在社會認知介入中,我們會向參加者提供長者參與義務工作的好處的資訊,提醒他們過去的成功,鼓勵他們設定目標和制定計劃,並且使他們接觸到模範行為。這項研究發現,義工參與的介入對介入後 6 星期的(自我報告)每星期參與義工分鐘有明顯的影響(5),與其他組比較。我們的研究目標是通過隨機分配對照實驗,驗證一個基於理論的社會認知介入對香港長者參與義務工作的影響。

iii. 計劃流程及指標



iv. 如何進行工作坊

介入研究概要

此介入研究選自一項最新研究 (Warner et al.,2014)。該研究基於早前的觀察研究及健康行動過程取徑 (Health Action Process Approach,HAPA) (Schwarzer et el., 2007)。行動過程取徑提出結果預期 (outcome expectancies) 及自我效能 (self-efficacy) 可於動機階段 (motivation stage) 提高行為意向 (Behavioral intentions)。而意向可於立志階段 (volitional phase) 通過自我管理策略 (self-regulation strategies),如自我監督及行動計劃,轉化成行為。原研究使用的兩小時介入研究被延長至一個月內每週一小時,合共四小時。

工作坊概覽

第一節: 退休 - 這對我來說意味著什麼?

- (一)研究簡介 5分鐘
- (二)破冰活動 15 分鐘
- (三)退休的意義、討論 15 分鐘
- (四)退而不休、協助他人(簡報) 20分鐘
- (五)總結及預告 5分鐘

第二節:參與義務工作的小測驗

- (一)重溫第一節、第二節簡介 5 分鐘
- (二)長者投身義務工作的好處 15 分鐘
- (三) 問答遊戲 35 分鐘
- (四)總結及預告 5分鐘

第三節:參與義務工作的理念

- (一)重溫第二節、第三節簡介 5分鐘
- (二)年長義工成榜樣、分享 20 分鐘
- (三)服務對象及義務工作範疇 15 分鐘
- (四)中心介紹義務工作機會 10 分鐘
- (五)義務工作的目的 5分鐘
- (六)總結及預告 5 分鐘

第四節: 從理念到行動

- (一)重溫第三節、第四節簡介 5 分鐘
- (二) 我的傳記 5分鐘
- (三) PEPP 測試、假如我會 5分鐘
- (四)跨越障礙 5分鐘
- (五)自我監察 5分鐘
- (六)八方支援 5分鐘
- (七) 更多義務工作機會 5 分鐘
- (八)各司其職、分享個人目標 20 分鐘

(九)總結及跟進 5分鐘

第一節:退休 - 這對我來說意味著什麼?

(一)研究簡介 5分鐘

引導員自信地以站立形式展開匯報:

- 歡迎各參加者
- 引導員及助手自我介紹
- 介紹研究項目
 - → 研究目的
 - → 目標群體
 - → 主要活動及時間表(工作坊及跟進問卷調查)
 - → 同饋
- 工作坊簡介
 - → 四次工作坊的目的及結構
 - → 工作坊內容擇要

(二)破冰活動 (傳球遊戲) 15 分鐘

目的:制造輕鬆的溝通環境,使參加者間建立初步關係。

引導員會指示參加者圍圈,提供一個球或其他物件並說明活動指引:

- 手持該物件的參加者會被邀請向組員作自我介紹,包括:
- 1) 你的名字?
- 2) 開心的事?
- 3) 覺得自己最叻是做什麼?
 - 完成自我介紹後,參加者應把物件拋向尚未自我介紹的參加者
 - 引導員或助手應為首個作自我介紹的人

自我介紹的過程中,助手應強調組員的共通點,例如興趣、技能等。

(三)討論退休的意義 15 分鐘

使用物資:白板及白板筆

目的:協助參加者反思自己的退休生活

引導員指示參加者分成四至五人的小組圍圈就坐,每組獲分派一名助手。

- 詢問參加者: 當提到「退休」,會想起什麼?,並將參與者所提出的關鍵字 (如很得閒,可以做自己想做的事等)寫在白板上,以肯定他們的想法
- 邀請小組就以下內容去討論,時間 10 分鐘。每組邀請一名代表(組長)將 組員的想法寫在 A3 大小紙張上,每組也分派了一名助手以引導討論及提 供協助
 - 1) 退休對我正面/負面(意義)
 - 2) 對退休的期望
 - 3) 理想退休的元素

4) 退休生活想做什麼?

完成小組討論後,邀請組長向所有參加者分享並匯報小組討論的成果(A3 紙可由組長手持或張貼於白板上)。

分組匯報後,引導員應將參加者所討論的內容組織及分類,並總結成數個重點。 例子:「看來我們大多數都認為健康、家庭及良好社交支援網絡是對優質退休生活中最 重要的。」

請注意:在此活動組成的組別是整個工作坊的朋輩支援小組。

(四)退而不休、協助他人(簡報) 20分鐘 引導員會介紹有關在退休期間幫助他人的概念

- 指出退休的好處如很多時間,享受人生,並指出要引導參加者了解想法正 面還是負面是在乎他的選擇
- 說明退休生活的不同範疇,例如發展興趣、陪伴朋友或家人、打理家務、 旅遊或文化活動
- 說明協助他人及積極參與義務工作是退休生活的其中一個重要範疇
- 說明參與義務工作與社會的關係
 - → 通過參與義務工作,長者可以學習新事物、關懷社會有需要的人, 藉此促進社會融和並強化長者在社會中扮演的角色
 - → 經濟效益
- 解釋參與義務工作能滿足長者對理想退休生活的期望,包括認識新朋友,其 他長者義工,透過增加活動以維持健康

(五)總結及預告 5分鐘

- 退休在乎參加者的看法,可以是人生的結束完結,也可以是一個新的開始。
- 第二節內容:小遊戲,勝出者可得到獎品

第二節:參與義務工作的小測驗

(一)重溫第一節、第二節簡介 5 分鐘

開始本節活動之前,請參加者根據第一節的分組就坐。助手應以對話協助組員互相認識。

引導員自信地以站立形式展開匯報:

- 歡迎各參加者
- 引導員再次自我介紹
- 簡介本節活動流程
 - → 了解參與義務工作的好處
 - → 分組問答遊戲

溫馨提示:參加者應與組員團隊協作。

(二)長者投身義務工作的好處 15 分鐘

註:可提供現實生活例子幫助說明

目的:說明長者投身義務工作的正面影響以刺激結果預期 (outcome expectancies) 的出現

引導員會簡介投身義務工作的好處:延遲慢性疾病出現、看少些醫生、減少身體疼痛、少些肢體行動不便 (手腳靈活,活動自如)、對壓力應付得更好、更多精力、生活滿意度更高、更好心情,減少抑鬱。

引導員亦會說明上述好處的因由,如增加自信心、經歷新挑戰、促進社交網絡、更健康 的生活、回饋社會及能夠有所作為。

接著,引導員會邀請小組就以下內容去討論,時間 5 分鐘。每組邀請一名代表(組長) 將組員的想法寫在 A3 大小紙張上,每組也分派了一名助手以引導討論及提供協助

- 你覺得假如你參與義工,你會有這些得益嗎?
- 那些得益你最看重呢?你的原因?

(三) 問答遊戲 35 分鐘

所需物資:問答用簡報、小禮物(如梳打餅)

目的:通過問答遊戲,討論參與義務工作在香港和外國的數據,包括:

- 1. 全港人士參與義務工作的比率
- 2. 香港長者參與義務工作的比率
- 3. 義工工作的本質
- 4. 香港長者不參與義務工作的原因
- 5. 義工機構的種類(如社會服務、醫療、文化、音樂、宗教、環境保護等)

引導員會主持一個分組問答遊戲,規則如下:

- 發問一個問題後、每組各自討論並得出答案
- 答對者得1分、答錯者得0分
- 問完所有題目後,得分最高的組別勝出

引導員應將分數紀錄在白板或其他當眼處,助手應協助各自組別組員討論

當問完所有題目,引導員會宣佈冠亞季殿軍。每組會各自獲得小禮物(此遊戲沒有落敗者,每組會獲得相同的獎品/小禮物)。引導員應以使遊戲在輕鬆愉快的玩氣氛下進行。

(四)總結及預告 5分鐘

- 了解參與義務工作的數據
- 參與義工有很多好處,你想做義工嗎?
- 第三節內容:觀看影片(長者義工成榜樣)、了解做義工可以有什麼選擇

第三節:參與義務工作的理念

- (一) 重溫第二節、第三節簡介 5 分鐘
- (二)長者義工成榜樣、分享 20 分鐘

所需物資:投影機及投影幕、可播放 MP4 格式影片的電腦

本部份會播放一段關於長者做義工的影片,影片時間5分鐘。這是用了模範行為的技巧, 以長者義工作為榜樣,去提高義工參與及自我效能。影片大綱如下:

麥生和蘇婆婆均已年逾七十。麥生數年前遇上意外而殘障,而蘇婆婆沒有接受過正式教育。二人都積極參與義務工作,如探訪獨居長者,教授長者使用電腦、寫部落格、Facebook等。他們都熱愛義務工作,認為自己被需要是值得高興的事情;亦可以將快樂傳播到其他人身上,對自己的心靈也有所裨益。除此之外,麥生和蘇婆婆還會分享做義務的心路歷程,從踏出第一步開始成為義工,到計劃如何參加義務工作,以致後來非常享受做義工。

接著,引導員會邀請小組就以下內容去分享,時間 5 分鐘。每組邀請一名代表(組長) 將組員的想法寫在 A3 大小紙張上,每組也分派了一名助手以引導討論及提供協助。

- 為何一般人都可以做義工?
- 你認為嘗「試」參與義務工作重要嗎?

分組匯報後,引導員應強調麥生和蘇婆婆雖然有限制 (殘障,不識字),但他們願意善用他們所有的去做義工。另外,嘗試是重要的,因為試過才知自己是否喜歡,或有興趣做那一方面的工作。

(三)服務對象及義務工作範疇 15 分鐘

引導員會介紹簡單的義務工作類型,如保護長者或病人、家務助理、接線生、接待處、 量血壓、籌款、探訪等。長者可以在筆記上圈起有興趣的對象和義工類型。

- 請參加者思考他們有興趣參與的義務工作範疇:
 - → 提供不同服務對象類別,以協助參加者作出選擇。如(根據年齡層) 兒童、青年、成人、長者,或其他弱勢社群(新移民、貧困家庭、 復康人士、長期病患者等)。
- 請參加者思考他們有興趣並擅長義務工作類型(分類取自香港義務工作 發展局):
 - → 人際關係(護衛、探訪、陪伴)
 - → 籌辦活動(參與、協助、組織休憩或其他社區活動)
 - → 文職、藝術設計、聯絡/接待
 - → 功課輔導、讀書會、家務助理

(四)中心介紹義務工作機會 10 分鐘

長者中心代表會簡介中心的義務工作機會,並邀請參加者報名。

(五)義務工作的目的 5分鐘

引導員會以例輔助,指示參加者於小組內分享各自最感興趣的義務工作類別(活動簡報的第18頁應於討論期間顯示)。助手應協助每位組員回答以上問題。***助手須於紀錄表上紀錄每位參加者感興趣的義務工作**

討論完結後,引導員會邀請2至3位參加者分享參與義務工作的原因,例如:

- 為興趣
- 協助他人
- 為大眾利益出一分力
- 與友好見面
- 接觸年青人
- 豐富學識及閱歷
- 得到被欣賞帶來的滿足感

引導員應提醒參加者辨識自己一週內擔任義工的最適頻率,以免超出負荷。 過量的義務工作可能對長者身體有壞處 (Musik, Herzog, and House, 1999)。

(六)總結及預告 5分鐘

- 第四節預告:如何將理念化為行動

第四節:從理念到行動

(一) 重溫第三節、第四節簡介 5 分鐘

(二) 我的傳記 5分鐘

- 引導員會解釋傳記的目的是提醒參加者的興趣和以前的義工經驗,在助手會協助參加者完成
- 請參加者回顧人生的不同階段,作答下列問題:
 - → 曾實踐的嗜好 (例如:看電影,聽音樂)及義工參與
 - → 開始實踐嗜好,擔任義工的年齡及活躍年期

(三) PEPP 測試、假如-我會 5分鐘

3.1 PEPP 測試

引導員向參加者介紹 PEPP 測試 (適當 Proper、適有 Effective、可行 Practicable、可計劃的 Plannable)以幫助制定義務工作計劃。

- 適當 (Proper) 是指參加者能否按自己的能力和興趣選擇義務工作
- 有效 (Effective) 是指參加者的義務工作能否有效地協助他們達成目標
- 可行 (Practicable) 是指參加者的計劃在地點和時間分配上是否可行
- 可計劃的 (Plannable) 是指義務工作計劃能否保持適量並配合參加者的日常行程

3.2 假如-我會

假如-我會旨在推動參加者藉不同動力計劃參與義務工作。參加者會遇上不同情況、物件、人物,而他們需要將這些的人和事跟義務工作以「假如……我會……」的句式連結起來。例如:「假如我吃了早餐,我會到義務工作的機構去」;「假如我看到行事曆,我會記得尋找可參與的義務工作」;「假如我遇到朋友,我會請教他們有關參與義務工作的經驗」。這些的自我提示可協助參加者喚起實踐參與義務工作的意向。

(四)跨越障礙 5分鐘

引導員會詢問參加者哪些技巧可令他們更容易活躍於參與義務工作,如自我獎勵 (主動的),提示、鬧鐘 (被動的),亦可邀請其他人協助支持或提醒。

(五)自我監察 5分鐘

引導員會說出義工日記的目的,是為自我監督。義工日記需要參加者紀錄:

- 是否曾參與義務工作
- 義務工作時數
- 感受(正面或負面)

(六)八方支援 5分鐘

引導員會邀請參加者列舉可支援他們實踐義務工作計劃的人。

(七)更多義務工作機會 5分鐘

引導員會提供附近地區可參與義務工作的資料予長者,包括地點(學校、醫院、長者護理中心、安老院等)及非政府機構組織的活動(照顧老弱婦孺等)。

(八)各司其職、分享個人目標 20 分鐘

引導員會邀請參加者訂立個人參與義工目標,並向大組分享,內容需包括:

- 機構
- 對象
- 性質
- 個人目標
- 有興趣的服務/活動
- 頻密程度
- 做義工的目標時數 (每星期)

(九)總結及跟進 5分鐘

- 引導員會鼓勵長者實踐參與義工服務,以達至豐盛退休。

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Intervention materials for experimental group Session 1:





研究「豊盛担休」

研究目標

- 提高本港退休長者對義工服務的認識
- 認識自己,訂立目標,探索如何開始及計 劃做義工
- 鼓勵長者自願參與義工服務
- 為有興趣做義工的長者提供義工配對
- 建立伙伴/同行者/朋輩支援小組



時段(研究開始後)	内容
第一個月	第一次問卷 工作坊 (四節)
第二個月 (第二星期)	第二次問卷
三個月	第三次問卷
半年	第四次問卷





服務對象

- (1) 50歲以上的退休人士,及
- (2) 在過去1年內曾參與少於四次義工



工作坊概述

- 介入: 在一個月內一星期1節,每節1小時,共4節
- 1.退休 這對我來說意味著什麼?
- 2.參與義務工作的小測驗
- 3. 參與義務工作的理念
- 4. 從理念到行動





抛球遊戲: 互相認識

- 自我介紹:
- 1) 你的名字?
- 2) 開心的事?
- 3) 覺得自己最叻是做什麼?





香港教育大学 The Educate Concessor

TR BEST

參與義務工作對社會的重要性

參與義務工作…

- … 退休人士是社會上重要的人力資源
- … 傳承長者的智慧,學習人生道理
- …關注一些被忽略的社會議題和需要
- … 令每個人都有更緊密的的連繫和社會和諧
- ···令社會運作得更好, 令社會更美好



分組討論: 退休, 想起什麼?

在黑板/白板等收集/寫下由參與者所提出 的關鍵字

- 1. 退休對我正面/負面(意義)
- 2. 對退休的期望
- 3. 理想退休的元素
- 4. 退休生活想做什麼?



作為家庭主婦,當退了下來…

- 仔大女大只顧往外跑,先生又忙
- 失落: 因不被需要
- 甚至被嫌棄,阻手阻腳





參與義務工作,還可以…

- 助人為快樂之本
- 再貢獻社會,如理髮義工,裝修,陪診
- 幫助有需要的人, 如社區服務導遊
- 好好利用時間
- 認識新朋友
- 學習新事物, 如認知障礙, 探訪

研究「皇虚伝体」

16

研究「皇虚伝体」



義務工作的經濟效益

香港大學2009年度調查:

- 過去十二個月參與義務工作的總時數是8700 萬小時
- 在金錢上貢獻了:

以最低工資(\$34.5)計算,30 億港元給香港社會 以每月平均薪金(\$63.2)計算,55 億港元給香港 社會



- · 社交支援網絡(家人、朋友) → 有同伴
- ・ 身體健康 → 健康 / 少病痛
- 正面積極的態度和情緒健康
- 經濟穩定、穩定居所
- 社會參與(工作、餘暇)

→可以在中心參與活動, 做義工!!

研究 「豊康遺休」



義務工作的經濟效益

50 - 75歲: 大約二百五十萬人

如其中一半人在1年內每星期做1小時義工

參與義務工作的總時數:

125萬 x 52 = 6500萬小時

在金錢上貢獻了:

6500萬 x \$34.5 = 22億港元



把握退休的機會回饋社會,退休可以更豐盛!



你見到的是日出,還是日落?

研究「豊彦祖休」



Session 2:





服務內容概述

- 介入: 在一個月內一星期1節,每節1小時,共4節
- 1.退休 這對我來說意味著什麼?
- 2. 参與義務工作的小測驗
- 3. 參與義務工作的理念
- 4. 從理念到行動



外國研究的數據顯示, 做義工可以達到!

表表 「自身技术」



研究 (建造设体)



例子

- 「我希望可以透過做義工令我對我的生 活感到更滿足和快樂」
- 「我希望認識與我志同道合的朋友」
- 「我希望透過做義工打發時間,讓我的 生活有些趣味」

研究 (皇盛祖休)



在過去十年,65歲及以上的人士活躍於義 工參與的比率…

- a. 在增加
- b. 在減少
- c. 保持不變





問題1

在2013年,在15 歲及以上的香港人曾參與 義務工作的比率是多少?

- a. 11% °
- b. 24% °
- c. 31% °

研究「皇虚協体」

香港長者還有很大進步空間!

參與義務工作-香港

- 2013年曾參與義務工作的比率: <u>11.4%</u> (香港政府統計處, 2015)
 - > 2013年曾參與義工人數:690,700
- 長者(65歳+)活躍於參與義工的比率: 5.5%(2015)
 - → 比外國發達國家**低**很多: 美國24.1%; 加拿大36.5%和德國多於三分之一

答案-問題2

在過去十年...

→a. ···在65歳及以上的人士活耀於義工參 與的比率已經增加: 5.5%(2015) 比 3.6% (2003)

→ 仍然比外國發達國家**低**

(香港政府統計處-運用時間模式 調查,2003及2015)



2. 健康狀況好

3. 社會服務機構積極推動

研究 (金雄)





現在潮流「活到老學到老」你願意每日都坐在家中慢慢與社會脫節…

還是主動為社區內其他人做一些好事 讓自己做個健康又潮流的「銀髮族」?

對任何義工服務都沒有興趣?

沒有興趣? 還是「未找到自己的興趣」?

令自己生活更充實快樂

身體健康不佳?

每個人的身體狀況和能力都不一樣 只要選擇合適自己的義工活動,

一樣可以幫助他人、

不知道如何參與… 沒有留意任何義工活動… 沒有合適的義工工作… 沒有同伴…

非常容易解決! 因為本計劃…

香港和市大門 The Educated University of University

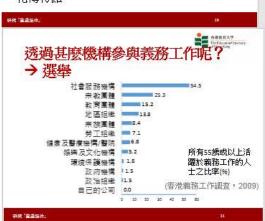
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問題5

在香港,55歲或以上人士最多是透過甚麼機構 參與義務工作呢?

- a. … 宗教團體, 如教會, 佛堂
- b. … 社會服務機構, 如老人中心
- c. ··· 康樂及文化機構, 如音樂事務統籌處, 文 化博物館





答案-問題5

在香港,55歲或以上人士透過甚麼機構 參與義務工作呢?

→b. … 社會服務機構

→反思: 還有其他機構? 你會想透過什麼 機構參與義務工作?





研究「童盛祖体」





分組討論

研究「豊麻緑休

請與你的組員分享你看完剛才短片…

- 有什麼感受 / 感想? 他們是普通人, 為什麼 做義工?
- 嘗「試」, 你認為重要嗎? (哪一個參與義工活動的好處你最認同/最想 得到?)

做義工不是那麼難, 其實可以很簡單!

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關於參與義務工作, 我最感興趣的是什麼?



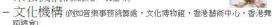
參與義務工作的「小」理念

- 護送長者、 海報設計 病人覆診 - 攝影
- 幫助做家務 做小手工
- 接聽電話 - 編織
- 招待 - 幫助用電腦 - 量血壓 - 陪人做運動 - 籌款 - 協助漕報
- 探訪



例子

- 鄰近社區中心
- 一 社會服務機構 (例如社會福利署,東華三院,紅十字會等
- 醫院,護理機構(例如日間醫院,老人院舍,匡智會,兒童之家等
- 援助機構 (例如食物銀行, 戒毒中心等)
- 宗教機構例如教會,佛堂等)



- 動物收容所(例如愛護動物協會)
- 自然保護機構(例如長青社,綠色和平等)
- 還有: 教育機構,體育會,政黨





目的:了解不同的服務 不同年齡組別 不同需要的組別 群體,按個人傾向去選 - 貧窮人士 - 兒童 - 患病人士 (你所選擇的不一定在其 - 青少年 - 傷殘人士 中, 我們只提供不同組 - 新移民 - 成人

- ^{單親家庭、獨居} 別讓你考慮) - 長者

我想對什麼人作義務工作?

- 更新人士

研究「豊盛退休」

- 有特殊教育需要的人士(自閉、弱智兒童)

- 少數族裔

什麼是我做得開心與有樂趣的? 我 擅長於作什麼? 義工服務範圍





可供參考的網址:

- 義務工作發展局
- 義工運動
- 社會福利署義工服務分區辦事處
- 參與義務工作資料庫:
- http://www.volunteerlink.net/index.php ?tn=vs_infol&ncid=all&lang=tw
- https://www.volunteeringhk.org/tc/swd_service_opportunities_ad vance_search/list
- http://www.volunteering.org.hk













研究「豊成退休」



訂立個人參與義工目標

Session 4:



歡迎參與研究:「豐盛退休」-提升香港退休人士參與義工服務的程度: 介入研究



選擇參與的義務工作:

- •哪些主題方面是我最感興趣的?
- · 我想服務**哪類人士**?
- 我擅長做什麼?/對我來說有什麼是有趣的?
- 我想用多少時間在義務工作上?性質:一次性 /定期?





服務内容概述

- 介入: 在一個月內一星期1節,每節1小時 , 共4節
- 1.退休 這對我來說意味著什麼?
- 2.參與義務工作的小測驗
- 3.參與義務工作的理念
- 4. 從理念到行動





目的: 提醒他們的與趣和以前的義工經驗

你想再次參加或是 你想再次參加或是	基小咖啡本美
	A CONTRACT OF THE PARTY OF THE PARTY OF THE PARTY.
務工作,和你的義務	
你哪些嗜好?(分組	討論)
niction was implementation of the	
前领 「童虚短朱」	

研究「重直技術」



因此

如果







計劃的例子: 何時? 何地? 與何人? 在早上10時我將 我将會在食物 在下午5時我將



為甚麽朋輩小組可以有效幫助我們達到目標?

a. 定期會面, 持續地提醒參加者要行動

b. 向小組其他成員報告自己表現

哪些技巧可以幫助你(如何能使你 更容易活躍於參與義務工作),如 果你有時不覺得喜歡的時候? (分組討論)

R. 文字 · · · · · · · · · · · · · · · · · ·					16	
香港教育大學 The Education University of thing Kong						
請在下面						
	曾否	城義	義工內容	時間	正面/1	負面に
	沒有	有			正面	負面
第1天 (日期:)				/1時		-
第2天 (日期:)		п		小時		
第3天(日期:)	0			/\ri		
第4天(日期:)				/1時	-	
第5天(日期:)	0			小時	п	
第6天{日期:}				小時		
第7天(日期:)		п		/1時		п
	2405	100			20	

掛起你的計劃是有幫助的!





一. 持續的提醒

香港和首大學 The Edward Unverse

- 我們繁忙的城市人大多十分忙碌,容 易忘記事情
- 朋輩小組的定期會面(每月)會不停提醒 參加者「 要行動呀! 」



二、報告成績

- 向小組組員報告的表現, 能幫助自己知 道自己的表現如何
- 為甚麽知道自己的表現如何那麽重要?



- 小朋友在學校默書會被評分:0分、50 分、100分
- 拿到高分的小朋友: 感到自己的努力 被認同,會繼續在下次默書前努力溫 習
- 拿到低分的小朋友,則會被提醒他們 在溫書時不夠努力,又或者溫書的方 法不適合。
- 因此,可以在下次點書前努力點溫書 ,或改善他的溫書方法以改善成績





- 在做義工上也一樣一向別人報告自己的 表現就像默書得到的分一樣讓你知道你 的表現如何
- 能成功達到目標,有成功感,會繼續努 力
- 未能達到目標, 就知道要麽是不夠努力 或者用錯了方法。所以只要下個月努力 點,或者想辦法改良自己的方法、模式 等等,就可以在下個月表現得好



而且與人分享快樂, 可以令你的快樂加倍!







研究「皇皇祖体」

研究 "皇虚证休。

與人分享快樂可以令你的快樂加倍:

- → 找一些可以和你一起做養工的朋友,或一 些會支持你做義工的朋友。
- → 也許當做義工時,你會遇到這些人並成為 朋友!?





各是教育大學 The Educate University 誰可以支持你實行你的計劃? (分組討論)

我會邀請以下的人支持我:

\$125 PK 17.1	이번째 생생님이 그렇게 다 아이들은 나가 있었다면 아이들에게 하는데
第1	位:
	位:
	位:

高導動省大學 The Education University

分組討論

- 在接下來的一個月內, 你會採取那些行 動來…
 - a. 找合適的義務工作
 - b. 提醒自己去進行義務工作

98



Handbook for the Experimental group:

「豐盛退休」-

提升香港退休人士參與義工服務的程度: 介入研究

義工手冊

姓名:_____

中心名稱:_____

交回張姑娘 - 日期: 7/5/2018

訂立個人參與義工目標

機構 1	, 2	, 3		
對象: □ 兒童	□ 青少	年 □ 成人 □	長者	
□ 貧窮人士	□ 患病人士	□ 傷殘人士	□ 新移民	
□ 單親家庭	□ 獨居人士	□自閉、弱物	智兒童	□ 少數族裔
]			
性質				
個人目標 1	, 2	, 3		
有興趣的服務/活	動 1			
3				
頻密程度				
做義工的目標時	數(每星期)			

我的傳記·養工參與 回顧你生命中的不同時期!請列明在你生命歷程中你曾實踐的嗜好 (例如:看電影,聽音樂)和義工參與。你曾活躍於這些活動多長時間?

		活動名稱			年齡		維打	寺多久				
	例	剪紙			30 歲		10	年				
	1			_		歲		:	年			
為你 作的	2			_		. 歲		:	年		參與 想法 想	
PEPF	3			_		. 歲		:	年		測試:	
	4		目標	_ 它是 適當		- 歲 它是 有效		它是可行		它是可計	否 劃的 ?	
	5			- 否	 是	歲 否	 是		年 是	否	是	
例	教剪紙,每個月1	1 次	幫人		√		√		√		√	

想法 1:					
想法 2:					
想法違決	 定動				

如何由想法到行動?「如果 - 因此」的句子很能幫助人牢記。因此,你可以將盡可能多的情況、物件或人物與某種義工參與相關聯。這些記憶工具可幫助你記住你的計劃。→ 克服困難,如: 起不了床,無人陪

如果	假如我食完早餐…	… 我會去機構參與義務工作。
物件 活動 假如我看見我的日曆或日程表・・・ ・・・ 我會醒起去尋找參與一項義務工作。 如果 因此 人物 活動 假如我與朋友見面・・・ ・・・ 我會問他參與義務工作的經驗。 如果 因此 如果 因此 如果 因此 如果 因此 如果 因此	如果	因此
一般の我看見我的日曆或日程表・・・・ 我會醒起去尋找参與一項義務工作。如果	如果	因此
如果	物件	·····································
如果	假如我看見我的日曆或日程表…	… 我會醒起去尋找參與一項義務工作。
人物 活動 假如我與朋友見面… … 我會問他參與義務工作的經驗。 如果 因此 如果 因此	如果	因此
假如我與朋友見面・・・ ・・・ 我會問他參與義務工作的經驗。 如果 因此 如果 因此	如果	因此
如果	人物	活動
如果	假如我與朋友見面…	… 我會問他參與義務工作的經驗。
	如果	因此
b技巧可以幫助你(如何能使你更容易活躍於參與義務工作),如果你有時不學得 喜 歡	如果	因此
	假如我與朋友見面··· 如果 如果	一 我會問他參與義務工作的經驗。 因此 因此
	設置鬧鐘,獎勵目己	
設置鬧鐘,獎勵自己		
		•••••••••••••••••••••••••••••••••••••••
設置鬧鐘,獎勵自己		

誰可以支持你實行你的計劃?

	2017年11月								
日	<u> </u>		=	四	五	六			
1	2	3	4	5	6	7			
8	9	10	11	12	13	14			
15	16	17	18	19	20	21			
22	23	24	25	26	27	28			
29	30	31	備註:						

			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	備註:	

	2017年12月									
日	<u> </u>	二	三	四	五	六				
					1	2				
3	4	5	6	7	8	9				
10	11	12	13	14	15	16				
17	18	19	20	21	22	23				
24	25	26	27	28	29	30				
31	備註:									

	2018年1月									
日		<u> </u>	三	四四	五	六				
	1	2	3	4	5	6				
7	8	9	10	11	12	13				
14	15	16	17	18	19	20				
21	22	23	24	25	26	27				
28	29	30	31	備註:		·				

	2018年2月										
日	_	<u> </u>		四	五	六					
				1	2	3					
4	5	6	7	8	9	10					
11	12	13	14	15	16	17					
18	19			22	23	24					
25	26	27	28	備註:							

日	<u> </u>		三	四	五.	六
				1	2	3
4	-		_		0	10
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

	2018年4月										
日	<u> </u>	<u> </u>	三	四	五	六					
1	2	3	4	5	6	7					
8	9	10	11	12	13	14					
15	16	17	18	19	20	21					
22	23	24	25	26	27	28					
29	30	備註:									

月份:	
填寫日期:	

請在下面填寫那些你做義工的情況。

	曾否做義工	?	義工內容	時間		感受?	
	沒有	有			_	正面	負面
第1天 (日期:)					小時		
第2天 (日期:)					小時		
第3天 (日期:)					小時		
第4天 (日期:)					小時		
第5天(日期:)					小時		
第6天 (日期:)					小時		
第7天 (日期:)					小時		

Appendix C. Table of intervention protocol and intervention materials for active control group

Table of intervention protocol

	Experimental group	Active control group
Session1	1. Facilitator introduced the research team, the goals of the study, schedule of sessions, follow-up questionnaire and financial incentive to the older participants.	1 Facilitator introduced the research team, the goals of the study, schedule of sessions, follow-up questionnaire and financial incentive to the older participants.
	 Ice breaking activity: Older participants introduced themselves to each other in the group. Facilitator introduced the meaning of retired life and discuss with the older 	 Ice breaking activity: Older participants introduced themselves to each other in the group. Facilitator introduced the meaning of retired life and discuss with the older
	participants. 4. Facilitator promoted the financial benefits came from volunteer activities, and encouraged older participants join volunteer works in the future. 5. Facilitator briefly concluded	participants. 4 Facilitator promoted the disadvantages due to lack of physical activity, and encouraged older participants having physical exercise in the future.
	the content of the first session.	 5 Our older tutor would teach older participants to learn stretching exercises focus on upper limbs. 6 Facilitator briefly concluded the content of the first session.

Session₂

- Facilitator introduced the benefits of joining volunteer activities, such as expand social network and increase psychological health.
- 2 Facilitator asked older participants to join the game: 5 questions quiz about the knowledge of volunteer activities.
- 3 Facilitator discussed with the older participants about the statistics of volunteer activities mentioned in the quiz, in order to raise their interest to join volunteer works.
- 4 Facilitator reminded older participants to reflect why they should join volunteer work.
- 5 Facilitator briefly concluded the content of the second session.

- 1 Facilitator asked older participants to join the game: 5 questions quiz about the knowledge of physical activities.
- 2 Facilitator encouraged the elderly found the interest to join physical activity.
- 3 Facilitator reminded older participants what should be aware during physical activity, such as warm up exercise.
- 4 Facilitator introduced the benefits of having physical activity, such as psychological happiness and physical health.
- Our older tutor would teach older participants to learn stretching exercises focus on middle body.
- 6 Facilitator briefly concluded the content of the second session.

Session₃

- 1 A review of the first two sessions was conducted by facilitator.
- Facilitator showed
 five-minute video clip in
 which two older volunteers
 were presented as role
 model, in order to prove
 that older participants can
 also join volunteer works.
- 3 Facilitator introduced different volunteer service target to the elderly, also

- 1 A review of the first two sessions was conducted by facilitator.
- 2 Facilitator showed five-minute video clip in which two elderly were having physical exercise, so they presented as role model, in order to prove that older participants can also join physical activities.
- 3 Facilitator introduced different type of physical

- different type of volunteer works. In order to let older participants choose what kind of volunteer works they would have interest to join.
- 4 Older participants were informed that they should identify their optimal level of joining volunteer work and they should not exceed this level to prevent burnout
- 5 Facilitator asked older participants set the goals related to volunteer work before the end of this session.

- exercise available for elderly. Also, different kinds of sport venue were introduced by facilitator.
- 4 Older participants were informed that they should identify their optimal level of having physical exercise and they should not exceed this level to prevent burnout.
- 5 Our older tutor would teach older participants to learn stretching exercise focus on lower limbs.
- 6 Facilitator asked older participants set the goals related to physical activities before the end of this session.

Session4

- Pacilitator asked older participants to recall what kind of skills or hobbies they were familiar with in young adulthood.Older participants were asked to if they could engage in volunteer work based on their past experience.
- 2 Older participants were asked to discuss their goals on volunteer works. Facilitator would discuss with them whether their goals were proper, effective, practical and plannable.
- 3 Older participants were

- 1 Facilitator asked older participants to recall what kind of physical activities they were familiar with in young adulthood. Older participants were asked to if they can re-engage these physical activities based on their past experience.
- 2 Older participants were asked to discuss their goals on physical activities.
 Facilitator would discuss with them whether their goals were proper, effective, practical and plannable.
- 3 Older participants were

- asked to complete the if-then implementation intentions in the worksheet. For example, if I saw my calendar, then I would be reminded to look for a volunteer engagement.
- 4 Older participants were asked to discuss about the tricks they can use on themselves, to make becoming active volunteers easy and the facilitator would lead the discussion among them.
- 5 Facilitator would deliver a handbook to each older participants, and asked them to make volunteering record on it, in order to help them to self-monitor their behavior
- 6 Facilitator briefly concluded the content of all sessions and end up the class.

- asked to complete the if-then implementation intentions in the worksheet. For example, if I saw my calendar, then I would be reminded to join physical activities.
- 4 Older participants were asked to discuss about the tricks they can use on themselves, in order to help them join physical activities actively, and the facilitator would lead the discussion among them.
- 5 Our older tutor would help older participants to review what stretching exercise they have learnt in the previous sessions.
- 6 Facilitator briefly concluded the content of all sessions and end up the class.

Intervention material for active control group Session 1:



提高本港退休長者對運動的認識認識自己,訂立目標,探索如何開始及計劃做運動鼓勵長者自願做運動

 時段 (研究開始後)
 內容

 第一個月
 第一次問卷 工作坊 (四節)

 第二個月 (第二星期)
 第二次問卷

 三個月
 第三次問卷

 半年
 第四次問卷

育技「重直協作」

工作坊概述

- 介入: 在一個月內一星期1節,每節1小時 ,共4節
- 1. 退休 這對我來說意味著什麼?
- 2. 參與運動的小測驗
- 3. 參與運動的理念
- 4. 從理念到行動

野党 (重産協体)



其他研究活動概述

- 介紹中心參與運動的機會
- 面對面問卷跟進: 六星期(介入後兩星期)、 三個月、六個月
- 完成介入活動及所有評估的長者,每位將 會獲得面值港幣200元的超市現金券。

杂类 (重要指体)



第一部分: 退休 - 這對我來說意味著什麼?



抛球遊戲: 互相認識/自我介紹

- 自我介紹:
- 1) 名字?
- 2) 平日常做的運動
- 3) 身體的痛症

研究「重産技体」

研究「豊盛塩休」



退休對他們來說意味著什麼?當想到 退休時,你們想起什麼?(分組討論)

- 在黑板/白板等收集/寫下由參與者所提出的關鍵字
- 1→ 退休對我正面/負面(意義)
- 2→ 對退休的期望
- 3→理想退休的元素
- 4→退休生活想做什麼?

研究 建造物体。







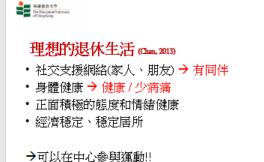






建議: 每日運動半小時

- 每日進行最少半小時的運動,或
- 隔日進行最少一小時的運動,或
- 每天累積半小時的運動時間(每次不少於 十分鐘)



研究「重盛協体」

研究「全部伝体」 を表現有大学 The Education University of these leaves

把握退休的機會回饋社會,退休可以更豐盛!



你見到的是日出,還是日落?

研究「重盛協体」

17

Session 2





• 長者(60歲+)定期做運動的比率: 83% (低強度帶氧運動, 如步行, 做家務) 21% (中強度以上帶氧運動)

→ 反思:香港的長者真的那麼"不熱心"做運 動?為什麼?

研究 「重越短失 会議を では Application (Pelicons

答案-問題3

→b. …更低. 20-30%

→ 美國人較活躍於做運動, 比我們更強壯

(YH Cheng, KL Chou, DJ MacFarlane, I Chi, "Patterns of physical exercise and contributing factors among Hong Kong older adults," Hong Kong Med J 2007;13(Suppl 4):S7-12, pp.9 and 10.)

研究 医直肠线 答案-問題4

根據問卷調查的顯示,60歲或以上人士 不參與運動的最常見的原因是……

→ c. ··· 健康理由

かを取り大学 The Education University

沒有時間?

可能有些退休人士真的很忙… 可是,大部份人說沒有時間做運動, 其實是在說「做運動不重要」

> 認識了各種做運動的好處 →有興趣嘗試做運動嗎?

研究 電腦程次



問題3

與美國人比較,60歲及以上的人士肌肉的 強度,彈性和敏捷程度…

- a. 更高
- b. 更低
- c. 一樣



根據問卷調查的顯示,60歲或以上人士 不參與運動的最常見的原因是…

- a. …天氣欠佳
- b. … 沒有時間
- c. … 健康理由



か使教育大学 The Education University of Compliant

怕累/懶惰/健康理由?

每個人的身體狀況和能力都不一樣 只要選擇合適自己的運動, 一樣可以強健身體、 令自己生活更充實快樂

•尋求醫生專業意見



答案-問題5

在香港,60歲或以上人士最常參與是甚 麼運動項目呢?

→b. ··· 徒手健體/伸展運動

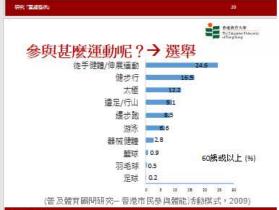




問題5

在香港,60歲或以上人士最常參與是甚麼運動 項目呢?

- a. … 太極
- b. … 徒手健體/伸展運動
- c. … 游泳









理想的退休生活 (Chan, 2013)

- · 社交支援網絡(家人、朋友) → 有同伴
- · 身體健康 > 健康 / 少病痛
- 正面積極的態度和情緒健康
- 經濟穩定、穩定居所
- →外國研究的數據顯示,做運動可以達到!

研究 電影技術 31





歡迎參與研究:「豐盛退休」-

提升香港退休人士參與運動的程度: 介入研究



• 介入: 在一個月內一星期1節,每節1小時,共4節

参数作大学 Tric Education University

● の使用作点率 The Education University

- 1. 退休 這對我來說意味著什麼?
- 2. 參與運動的小測驗
- 3. 參與運動的理念
- 4. 從理念到行動



第三部分: 參與運動的理念

- 有同伴
- 健康 / 少病痛
- 數據證明: 做運動可以!

理想退休生活的元素:

- 經驗運動人士現身說法
- →了解你有什麼選擇

SHACE STREET,



梁女士

- 74歳
- 新世界維港泳2016 最年長泳手
- 曾參與國際比賽
- 由女兒陪伴参賽



- 70歲
- 健體助延年運動協會有限公司的主席
- 參與保齡球, 乒乓球, 網球, 羽毛球等



兩位長者克服身體上、年紀上的限制 有限的知識和能力 仍然樂意盡力參與不同運動



分組討論

請與你的組員分享你看完剛才短片…

- •有什麼感受/ 感想? 他們是普通人, 為什麼做 運動?
- 嘗「試」, 你認為重要嗎?

(哪一個做運動的好處你最認同/最想得到?)

參與運動的「小」理念

• 多做家務

研究「重要因仇」

- 多步行, 散步
- 少行樓梯, 保護膝關節
- 少搭車, 早一個站下車
- 多戶外活動,少看電視



かられ作大学 The Library in How comp of Horn Kinns





我想與什麼人一起作運動?

- 家人,子女,孫
- 朋友, 老友記
- 太太/丈夫
- 自己一個也可以運動



recreation/activities/elderlyact.htm - 房協長者通-長者正確運動須知

odel/221





但請留意: 注意事項

- 若有慢性疾病或有懷疑, 應先請教醫生
- 在進行運動前做適量熱身運動
- 量力而為,從較輕量,短時間的運動開始
- 留意天氣情況, 避免在大風, 大雨, 太熱時
- 避免空肚,或太飽做運動
- 注意定時補充水分

定立個人運動目標

運動類型/活動_ 地點/機構____

• 若身體不適,應立即停止及向醫護人員查詢,如發燒,心口痛,頭暈等

選擇參與的運動:

- 哪些**主題/方面**是我最感興趣的?對我來說有什麼是**有趣**的?
- 什麼地點可以運動?

研究「聖越短休」

- 我想與什麼人一起運動?
- 我想用多少時間在運動上?性質:一次性/定期?

を接入作大学 TvTLAgeIntThickerity vtTlag Kang

研究「聖經短休」

同伴_____ 個人目標___ 時段____ 頻密程度

19

18

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歡迎參與研究:「豐盛退休」-提升香港退休人士參與運動的程度:介入 研究



第四部分: 從理念到行動







服務内容概述

- 介入: 在一個月內一星期1節,每節1小時 , 共4節
- 1.退休 這對我來說意味著什麼?
- 2.參與運動的小測驗
- 3.參與運動的理念
- 4. 從理念到行動



理想退休生活的元素:

- 有同伴
- 健康 / 少病痛
- 數據證明: 做運動可以!
- 經驗運動人士現身說法
- 了解中心及附近的機會
- 了解你曾參與的運動











:每日的計劃 -做

一點點但可做到的



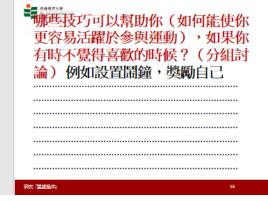
什麼技巧可以幫助你, 如果你 不覺得不想做的時候?







研究 T<u>世</u>多层体 17



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多一個技巧: 自我監督



- 什麼會幫助我實行我的計劃?
- 有什麼問題會出現?
- 我可以如何改善我的計劃?





香港教育大學 The Education University of Horse Monte

> 指數人(三至十人) 定期會面,而且在會面時 告訴組員他們過去一段時間能否達到他們的 目標

為甚麼朋輩小組可以有效幫助我們達到目標? 這是因為…

- a. 定期會面, 持續地提醒參加者要行動
- b. 向小組其他成員報告自己表現

研究「重要是休」 23



請在下面填寫那些你做運動的情況。

曾否做運 運動內容 時間 正面/負面感								
	语曾 健		運動內容	時間	!\面北 受			
	沒有	有			正面	負面		
第1天(日期:)				小時				
第2天(日期:)				小時	0			
第3天(日期:)				小時				
第4天 (日期:)	0	•		小時				
第5天(日期:)	0	•		小時				
第6天 (日期:)				小時	0	0		
第7天(日期:)				小時				



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一. 持續的提醒

- 我們繁忙的城市人大多十分忙碌,容易忘記事情
- 朋輩小組的定期會面(每月)會不停提醒 參加者「要行動呀!」

研究「直接短休」



二. 報告成績

- 向小組組員報告的表現, 能幫助自己知 道自己的表現如何
- 為甚麼知道自己的表現如何那麼重要?



- 在做運動上也一樣一向別人報告自己的表現就像默書得到的分一樣讓你知道你 的表現如何
- 能成功達到目標,有成功感,會繼續努 カ
- 未能達到目標, 就知道要麼是不夠努力 或者用錯了方法。所以只要下個月努力點,或者想辦法改良自己的方法、模式 等等, 就可以在下個月表現得好



誰可以支持你實行你的計劃? (分組討論)

我會邀請以下的人支持我:

第1位:..... 第2位:..... 第3位:.....





- 小朋友在學校默書會被評分:0分、50 分、100分
- 拿到高分的小朋友: 感到自己的努力 被認同,會繼續在下次默書前努力溫
- 拿到低分的小朋友,則會被提醒他們 在溫書時不夠努力,又或者溫書的方 法不適合。
- 因此,可以在下次點書前努力點溫書 ,或改善他的溫書方法以改善成績



香港教育大學 The Education University

研究「曹越祖休」

與人分享快樂可以令你的快樂加倍:

- → 找一些可以和你一起做運動的朋友,或一 些會支持你做運動的朋友。
- → 也許當做運動時,你會遇到這些人並成為 朋友!?





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每逢我們開始做一件事情時,有 一段短時間是困難的!

定期參與運動…

- …你會成為這方面的專家
- …建立友誼和成為好朋友
- …你可以帶來重要的影響
- …你可以幫助新的伙伴找到他們做運動的方向







Appendix D. Questionnaires used in the baseline, six-week, three-month, and six-month assessments

Baseline assessments

工機構的成員去照顧他人的孩子,這便會在本問卷中被算為義務工作。	也作為義
A1 在過去四個星期內,你曾經做義工嗎? 0 □ 完全沒有 1 □ 有	
A2 在過去四個星期內,如果你曾經定期參加義務工作,每日做次, 花費小時參加義務工作	每一次
A3 在過去四個星期內,如果你曾經不定期參加義務工作,平均每星期會花費 參加義務工作	小時
A4 在過去四個星期內,你參加過的義務工作的類型是什麼? (可選多項) 1 □ 文娛 6 □ 院舍照顧 2 □ 體力勞動 7 □ 社會文化 3 □ 陪伴 8 □ 行政 4 □ 家務 9 □ 與社交/人際關係相關的 5 □ 教育 10 □ 管理	

所有受訪者回答

B 做義工的動機_(Clary et al. 1998; 中文版 Ho, You, & Fung, 2012)

在下列左側是一些對義務工作看法的句子,無論你有沒有義務工作經驗,請就自己的看法選出最合意的答案。

取口息的合条。 我覺得:	不準			一般			十分
投見付・	不孕 確/			为又			準確/
	不重						十分
	要						重要
	女 1	2	3	4	5	6	2 7
B1. 義務工作能使我有機會接觸,及體驗自己將來有興趣的			<u> </u>				
工作。							
B2. 我的朋友大多數是義工。							
B3. 我關懷那些比我不幸的人。							
B4. 跟我要好的朋友希望我做義工。							
B5. 義務工作能使我感到自己很重要。							
B6. 我認識的人對社會服務也有興趣。							
B7. 不論心情有多壞,義務工作可使令我忘憂。							
B8. 我真心真意地關懷我的服務對象。							
B9. 透過參與義務工作, 我可能不會那麼孤單。							
B10. 參與義務工作,我能夠結識助我發展事業的人。							
B11. 義務工作能緩和我對自己比別人幸運的不安。							
B12. 參與義務工作,我能了解現時的工作更多。							
B13. 義務工作能提昇我的自尊感。							
B14. 義務工作讓我對事物有新的看法。							
B15. 義務工作讓我有機會探索不同的行業。							
B16. 我同情有需要幫助的人。							
B17. 與我關係密切的人很重視社區服務。							
B18. 義務工作讓我學到直接及親身的經驗。							
B19. 我覺得幫助別人很重要。							
B20. 義務工作幫助我處理個人問題。							
B21. 義務工作能助我在專業工作上成功。							
B22. 我只會做那些我認為很重要的事情。							
B23. 義務工作對於我相熟的朋友很重要。							
B24. 義務工作讓我可助我逃避個人的煩憂。							
B25. 義務工作中可以學到如何跟不同性格的人相處。							
B26. 義務工作可讓我感到別人需要我。							
B27. 義務工作會令使自我感覺良好。							
B28. 義工經驗可以豐富我的個人履歷。							
B29. 參與義務工作可以認識新朋友。							
B30. 參與義務工作,可發揮我的強項。							

C 做義工的意向 (Wang et al., 2011)					
	完全不				極度
是否打算在未來做義工?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
	空仝不命				然

		761-1				131)
C1	你是否打算在未來做義工?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
		完全不會				經常會
C2	將來你參加義工服務的頻率?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
		非常不同意				非常同意
C3	你是否同意你已決定將來會做義工服務?	1	2 🗆	3 🗌	4 🗌	5 🗌

D 做義工的收穫 (Warburton et al., 2001)

你覺得參與義務工作有大機會有以下收穫 (1 分非常不可能; 7 分非常可能)?

1,3 .> 0 1	你是的多类我仍工作为代放自用的上状设(1万分市一方配,1万分市方配)							
		非常不	不可	少許	一般	少許	可能	非常可
		可能	能	不可		可能		能
				能				
		1	2	3	4	5	6	7
收穫								
D1	感覺自己有用							
D2	幫助有需要的人							
D3	得著樂趣和滿足感							
D4	認識不同的人							
D5	保持忙碌和活躍							

自我效能 (Wang et al., 2011)

	D DWXME (Trung of any 2011)					
		有非常多				完全沒有
E1	你對自己參與義工活動的能力有多大信 心?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
E2	你對自己能夠克服在做義工的過程中所遇 到的障礙和挑戰有多大信心?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
E3	你在多大程度相信你能參與義工活動?	1 🗌	2 🗌	3 🗌	4 🗌	4 🗆

F 行動計劃與自我監督 (Sniehotta et al., 2005)

		完全 不真 確					完全 真確
		1	2	3	4	5	6
	計劃						
我已	上做了一個關於的詳細計劃						
F1	何時做義務工作,						
F2	在哪個組織參與義務工作,						
F3	如何做義務工作,						
F4	有多經常參與義務工作						
自我	· 法監督						
在遊	员去四個星期內,我有						
F5	不斷監測自己是否按照我的計劃定期地						
	做義工						
F6	仔細注意我是否按我計劃的頻密程度做						

義工			

G 對承傳的關注 (McAdams & de St Aubin, 1992; 中文版 Cheng, 2009)

請問以下嘅句子係咪適合用嚟形容你,請在各題右邊圈出適當嘅數字來代表你嘅答案:

0 = 從不適用,1 = 間中適用,2 = 頗常適用,3 = 經常適用。

		從不適用	間中適用	頗常適用	經常適用
G1	我嘗試將自己從經驗中獲得嘅知識傳授俾下一代	0□	1 🗆	2 □	3 □
G2	我唔覺得其他人需要我	0□	1 🗆	2 □	3 □
G3	我諗自己會鍾意老師嘅工作	0□	1 🗆	2 □	3 □
G4	我覺得好似有好多人因我而改變	0□	1 🗆	2 □	3 □
G5	我有參與義務慈善工作	0□	1 🗆	2 □	3 □
G6	我所做同創作嘅嘢都能夠影響其他人	0□	1 🗆	2 □	3 □
G7	我喺大部分情況下都力求創新	0□	1 🗆	2 □	3 □
G8	我相信自己死後會俾人永遠懷念	0□	1 🗆	2 □	3 □
G9	我認為社會有責任救濟所有無家可歸嘅人	0□	1 🗆	2 □	3 □
G10	其他人認為我對社會有獨特嘅貢獻	0□	1 🗆	2 □	3 □
G11	如果我唔能夠生育,我會收養其他人嘅仔女	0□	1 🗆	2 □	3 □
G12	我嘗試將我嘅專長傳授俾其他人	0□	1 🗆	2 □	3 □
G13	我覺得自己有乜嘢可以長留後世	0□	1 🗆	2 □	3 □
G14	總括嚟講,我所做嘅並方為其他人帶嚟正面嘅影響	0□	1 🗆	2 □	3 □
G15	我覺得自己好似對其他人冇乜建樹	0□	1 🗆	2 □	3 □
G16	我一生曾對好多唔同嘅人同團體付出,亦曾參與無 數嘅活動	0	1 🗆	2 🗆	3 □
G17	其他人都稱許我為一個貢獻良多嘅人	0□	1 🗆	2 □	3 □
G18	我有責任改善自己居住嘅社區	0□	1 🗆	2 □	3 □
G19	其他人會向我求教	0□	1 🗆	2 □	3 □
G20	我覺得自己嘅貢獻死後都會繼續發揮作用	0□	1 🗆	2 □	3 □

H 對社區的歸屬感 (MacMillan & Chavis, 1986; 中文版 Mak, 2009)

以下的句子是有關你所居住的那區以及區內的鄰舍的。請表示你對每句句子的同意程度。

		非常同意	同意	不同意	非常不同意
H1	我認為我所居住的街/屋村是一個好的居住地方	1 🗆	2 □	3 □	4 □
H2	住在這條街/屋村的人的價值觀和我的不相同	1 🗆	2 □	3 □	4 □
Н3	我的鄰居對他們所住的街/屋村的需求和我的一樣	1 🗆	2 🗆	3 □	4 □
H4	我可以辨認到大部份住在這條街/屋村的人	1 🗆	2 □	3 □	4 □
H5	我所居住的街/屋村給我家的感覺	1 🗆	2 □	3 □	4 □
H6	很少鄰居認識我	1 🗆	2 □	3 □	4 □
H7	我在意鄰居對我的行為舉止的看法	1 🗆	2 □	3 □	4 □
H8	我對我所居住的街/屋村的事務完全没有影響力	1 🗆	2 □	3 □	4 □
H9	如果我所居住的街/屋村內有問題出現,區/屋苑內 的住客會解決	1 🗆	2 🗆	3 □	4 □
H10	住在這條街/屋村對我來說是好重要的	1 🗆	2 □	3 □	4 □

		非常同意	同意	不同意	非常不同意
H11	普遍來說,住在這條街/屋村的人相處並不融洽	1 🗆	2 □	3 □	4 □
H12	我預計我會在我所居住的街/屋村住一段頗長的 時間	1 🗆	2 🗆	3 🗆	4 🗆

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1 1	個人]			
12	請問係	尔現在的婚姻狀況: 1= 未婚 2= 已婚 3= 離婚 4= 喪偶 5=	分居	6=同居
13	請問係	尔現在是多少歲?(足齡)		
14		尔係乜嘢教育程度呢? 1 = 無讀過書 2 = 卜卜齋 3 = 幼稚園 4 = 小學年級 5 = 中學年級 6 = 大專(非學位/副學士) 7 = 大學(學士學位) 8 = 大學(碩士/博士學位)		
J1	出: 下	建康狀況 一部份我會了解下你嘅健康狀況。 覺得你而家健康情況係點呢? 常好 2 □ 幾好 3 □ 普通 4 □ 唔係幾好 5 □ 唔	吾好	
J2	咁i	耐以嚟有無醫生曾經話過你有任何長期病患? 1 □ 有 (不用讀出以下名單的病, 只圈出他的長期病患, 其他記 2 □ 沒有	請在 k	:註明)
	a)	關節炎	無 0	有 1
	b)	心臟病	0	1
	c)	高血壓	0	1
	d)	氣喘 (包括慢性支氣管炎或肺氣腫、哮喘)	0	1
	e)	胃病 (包括消化道潰瘍,十二指腸潰瘍)	0	1
	f)	糖尿病	0	1
	g)	精神病 (抑鬱, 焦慮症)	0	1
	h)	中風 (包括腦血管病、爆血管)	0	1
	i)	癌病 (包括任何部位)	0	1

j)	眼病 (包括糖尿眼、白內障、青光眼)	0	1
k)	其他慢性病 (即需多過一年長期醫理;	0	1
如紅	I斑正狼瘡、甲狀腺、貧血) 請註明		

Six-week, Three-month, and Six-month Assessment Questionnaire

每星期參與義工時間 (Ayalon, 2008)

助(例如照顧自己的孫兒)在本問	自願性的工作。給鄰居、朋友及家人提供的非正式幫 卷中並不算作義務工作。但是,如果你正式地作為義 這便會在本問卷中被算為義務工作。
A1	在過去四個星期內,你曾經做 0 □ 完全沒有 1 □ 有	義工嗎?
A2 花費	在過去四個星期內,如果你曾 {小時參加義務工作	經定期參加義務工作,每日做次,每一次
A3 參加	在過去四個星期內,如果你曾]義務工作	經不定期參加義務工作,平均每星期會花費小時
A4	在過去四個星期內,你參加超 1 □ 文娛 2 □ 體力勞動 3 □ 陪伴 4 □ 家務 5 □ 教育	 的義務工作的類型是什麼? (可選多項) 6 □ 院舍照顧 7 □ 社會文化 8 □ 行政 9 □ 與社交/人際關係相關的 10 □ 管理

關於「做義工」,我們是指在一個組織中(例如非牟利機構、運動俱樂部、或義工組織或

所有受訪者回答

B 做義工的動機_(Clary et al. 1998; 中文版 Ho, You, & Fung, 2012)

在下列左側是一些對義務工作看法的句子,無論你有沒有義務工作經驗,請就自己的看法選出最合意的答案。

我覺得:	不準			一般			十分
	確/			,			準確/
	不重						十分
	要						重要
	1	2	3	4	5	6	7
B1. 義務工作能使我有機會接觸,及體驗自己將來有興趣的							
工作。							
B2. 我的朋友大多數是義工。							
B3. 我關懷那些比我不幸的人。							
B4. 跟我要好的朋友希望我做義工。							
B5. 義務工作能使我感到自己很重要。							
B6. 我認識的人對社會服務也有興趣。							
B7. 不論心情有多壞,義務工作可使令我忘憂。							
B8. 我真心真意地關懷我的服務對象。							
B9. 透過參與義務工作, 我可能不會那麼孤單。							
B10. 參與義務工作,我能夠結識助我發展事業的人。							
B11. 義務工作能緩和我對自己比別人幸運的不安。							
B12. 參與義務工作,我能了解現時的工作更多。							
B13. 義務工作能提昇我的自尊感。							
B14. 義務工作讓我對事物有新的看法。							
B15. 義務工作讓我有機會探索不同的行業。							
B16. 我同情有需要幫助的人。							
B17. 與我關係密切的人很重視社區服務。							
B18. 義務工作讓我學到直接及親身的經驗。							
B19. 我覺得幫助別人很重要。							
B20. 義務工作幫助我處理個人問題。							
B21. 義務工作能助我在專業工作上成功。							
B22. 我只會做那些我認為很重要的事情。							
B23. 義務工作對於我相熟的朋友很重要。							
B24. 義務工作讓我可助我逃避個人的煩憂。							
B25. 義務工作中可以學到如何跟不同性格的人相處。							
B26. 義務工作可讓我感到別人需要我。							
B27. 義務工作會令使自我感覺良好。							
B28. 義工經驗可以豐富我的個人履歷。							
B29. 參與義務工作可以認識新朋友。							
B30. 參與義務工作,可發揮我的強項。							

C 做義工的意向 (Wang et al., 2011)

	-					
		完全不				極度
C1	你是否打算在未來做義工?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
		完全不會				經常會
C2	將來你參加義工服務的頻率?	1 🔲	2 🗌	3 🗌	4 🗌	5 🗌
		非常不同意				非常同意
C3	你是否同意你已決定將來會做義工服務?	1 🗌	2	3 🗌	4 🗌	5 🗌

D 做義工的收穫 (Warburton et al., 2001)

你覺得參與義務工作有大機會有以下的收穫 (1分非常不可能;7分非常可能)?

		非常不	不可	少許	一般	少許	可能	非常可
		可能	能	不可		可能		能
				能				
		1	2	3	4	5	6	7
收穫								
D1	感覺自己有用							
D2	幫助有需要的人							
D3	得著樂趣和滿足感							
D4	認識不同的人							
D5	保持忙碌和活躍							

E 自我效能 (Wang et al., 2011)

		有非常多				完全沒有
E1	你對自己參與義工活動的能力有多大信 心?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
E2	你對自己能夠克服在做義工的過程中所遇 到的障礙和挑戰有多大信心?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
E3	你在多大程度相信你能參與義工活動?	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌

F 行動計劃與自我監督 (Sniehotta et al., 2005)

- 1.	J的时期共日级监督(Sincinoted of this 2006)						
		完全 不真 確					完全真確
		1	2	3	4	5	6
	計劃						
我E	己做了一個關於的詳細計劃						
F1	何時做義務工作,						
F2	在哪個組織參與義務工作,						
F3	如何做義務工作,						
F4	有多經常參與義務工作						
自我	· 於監督						

在遊	5去四個星期內,我有			
F5	不斷監測自己是否按照我的計劃定期地做義工			
F6	仔細注意我是否按我計劃的頻密程度做 義工			

G 對承傳的關注 (McAdams & de St Aubin, 1992; 中文版 Cheng, 2009)

請問以下嘅句子係咪適合用嚟形容你,請在各題右邊圈出適當嘅數字來代表你嘅答案:

0 = 從不適用,1 = 間中適用,2 = 頗常適用,3 = 經常適用。

		從不適用	間中適用	頗常適用	經常適用
G1	我嘗試將自己從經驗中獲得嘅知識傳授俾下一代	0□	1 🗆	2 □	3 □
G2	我唔覺得其他人需要我	0□	1 🗆	2 □	3 □
G3	我諗自己會鍾意老師嘅工作	0□	1 🗆	2 □	3 □
G4	我覺得好似有好多人因我而改變	0□	1 🗆	2 □	3 □
G5	我有參與義務慈善工作	0□	1 🗆	2 □	3 □
G6	我所做同創作嘅嘢都能夠影響其他人	0□	1 🗆	2 □	3 □
G7	我喺大部分情況下都力求創新	0□	1 🗆	2 □	3 □
G8	我相信自己死後會俾人永遠懷念	0□	1 🗆	2 □	3 □
G9	我認為社會方責任救濟所有無家可歸嘅人	0□	1 🗆	2 □	3 □
G10	其他人認為我對社會有獨特嘅貢獻	0□	1 🗆	2 □	3 □
G11	如果我唔能夠生育,我會收養其他人嘅仔女	0□	1 🗆	2 □	3 □
G12	我嘗試將我嘅專長傳授俾其他人	0□	1 🗆	2 □	3 □
G13	我覺得自己冇乜嘢可以長留後世	0□	1 🗆	2 □	3 □
G14	總括嚟講,我所做嘅並冇為其他人帶嚟正面嘅影響	0□	1 🗆	2 □	3 □
G15	我覺得自己好似對其他人有乜建樹	0□	1 🗆	2 □	3 □
G16	我一生曾對好多唔同嘅人同團體付出,亦曾參與無 數嘅活動	0□	1 🗆	2 🗆	3 □
G17	其他人都稱許我為一個貢獻良多嘅人	0□	1 🗆	2 □	3 □
G18	我有責任改善自己居住嘅社區	0□	1 🗆	2 □	3 □
G19	其他人會向我求教	0□	1 🗆	2 □	3 □
G20	我覺得自己嘅貢獻死後都會繼續發揮作用	0□	1 🗆	2 🗆	4 🗆

H 對社區的歸屬感 (MacMillan & Chavis, 1986;中文版 Mak, 2009)

以下的句子是有關你所居住的那區以及區內的鄰舍的。請表示你對每句句子的同意程度。

		非常同意	同意	不同意	非常不同意
H1	我認為我所居住的街/屋村是一個好的居住地方	1 🗆	2 □	3 □	4 □
H2	住在這條街/屋村的人的價值觀和我的不相同	1 🗆	2 □	3 □	4 □
Н3	我的鄰居對他們所住的街/屋村的需求和我的一樣	1 🗆	2 🗆	3 □	4 🗆
H4	我可以辨認到大部份住在這條街/屋村的人	1 🗆	2 □	3 □	4 □
H5	我所居住的街/屋村給我家的感覺	1 🗆	2 □	3 □	4 □

		非常同意	同意	不同意	非常不同意
H6	很少鄰居認識我	1 🗆	2 □	3 □	4 🗆
H7	我在意鄰居對我的行為舉止的看法	1 🗆	2 □	3 □	4 □
H8	我對我所居住的街/屋村的事務完全没有影響力	1 🗆	2 □	3 □	4 □
H9	如果我所居住的街/屋村內有問題出現,區/屋苑內 的住客會解決	1 🗆	2 🗆	3 □	4 🗆
H10	住在這條街/屋村對我來說是好重要的	1 🗆	2 □	3 □	4 □
H11	普遍來說,住在這條街/屋村的人相處並不融洽	1 🗆	2 □	3 □	4 □
H12	我預計我會在我所居住的街/屋村住一段頗長的 時間	1 🗆	2 🗆	5 🗆	6 🗆

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