



*Buddhist Tzu Chi Medical Foundation*

# **Volunteering could be an intervention method to prevent mental health problem in aging people**

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# Outlines

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# Introduction

- In Taiwan, the population of aging people was more than 14%.

(Ministry of Interior, 2018)

- The prevalence rate of cognitive function impairment and depression in aging people is 24.18% and 19-24%, and it is a heavy burden for the caregiver.

(Ministry of Health and Welfare, 2013; Lin, Chen & Lin, 2010)



# Introduction

- Volunteering can improved mental well-being, and increase the chance of finding social support and contact.

(Greenfield & Marks, 2004; Morrow-Howell, Hinterlong, Rozario & Tang, 2003; Wu, Tang & Yan, 2005)



# Objective

- To investigate the difference of mental health between aging people who are engage volunteers and common community residents.



# Method and Material

- Participants
  - Participants were students in Tzu-Chi volunteers training courses or courses for aging people in community between 2016 and 2017.
- Volunteers
  - Volunteers were Tzu-Chi volunteers.
- Community residents
  - Community development association's courses for elders' health promotion part.



# Method and Material

- Elder's cognitive problem intellectual functioning
  - Short Portable Mental Status Questionnaire (SPMSQ)
- Depression symptoms
  - 15 items Geriatric Depression scale



Attend the class (n=1650):  
Volunteers (n=1251)  
Community residents (n=399)

Exclude (n=757):  
Younger than 65 year-old(n=612)  
Volunteers (n=552)  
Community residents (n=60)  
Did not answer the full  
questionnaires(n=175)  
Volunteers (n=161)  
Community residents (n=14)

Participate this study (n=863):  
Volunteers (n=538)  
Community residents (n=325)





# Result

**Table 1. Demography**

	Total Participant (n=863) Mean±sd	Volunteering (n=538) Mean±sd	Community (n=325) Mean±sd	P
<b>Age***</b>	72.05±6.14	70.01±4.33	75.42±7.14	<.001***
<b>Male, n(%)</b>	202(23.4%)	129(24.0%)	73(22.5%)	.610
<b>Education***</b>				<.001***
illiterate	114(13.2%)	46(8.6%)	68(20.9%)	
Primary school	258(29.9%)	186(34.6%)	72(22.2%)	
Secondary school	166(19.2%)	117(21.7%)	49(15.1%)	
High school	197(22.8%)	121(22.5%)	76(23.4%)	
University and above	128(14.8%)	68(12.6%)	60(18.5%)	

**Note.** Age was measured by t-test, education was measured by chi-square.

**\*\*\*: p<.001**



# Result

**Table 2. GDS-15 score and SPMSQ score difference between Volunteers and Community residents**

	n	Unadjusted mean	Adjusted mean	T test P-values
				Between volunteer status
<b>GDS-15</b>	863			.016*
<b>Volunteering</b>	538	1.88±2.145	1.796±0.101	
<b>Community</b>	325	2.08±2.422	2.225±0.134	
<b>SPMSQ</b>	863			.006**
<b>Volunteering</b>	538	0.02±0.219	0.063±0.025	
<b>Community</b>	325	0.25±0.877	0.184±0.033	

**Note. \*p<.05, \*\*p<.01**



# Conclusion

- The result show that volunteers did have better mental health than community residents.
- Other research show continued work employment and volunteers aging people better than non-volunteering retirees.

(Schwingel, Niti, Tang & Ng, 2009)



# Conclusion

- limitations
  - The Tzu-Chi volunteers in this study had training more than two years, and engaging in volunteering before the training.
  - Some factors, like continue working and social support have the same effect. But in this study, we didn't discuss those factor.