



Original article

Attitudes related to social distance between commissioned welfare volunteers (minsei-iin) and people with mental illness

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Abstract

Objective: This study explored the factors influencing commissioned welfare volunteers' (CWVs) attitudes toward mental illnesses and how their attitudes correlated with their social distance from people with mental illness.

Materials and Methods: Data from 223 CWVs were analyzed statistically. Factor extractions for the Image for Mental Illness Scale (IMI) and Social Distance Scale (SDS) were calculated. We examined the relations between factors in IMI and SDS.

Results: CWVs' attitudes were classified as Understanding (understanding of the condition), Secure (feelings of safety in the presence of those with mental illness), and Activity (reactions to the behaviors of people with mental illness). Social distance from those with mental illness was classified as Public and Private Interactions. CWVs' interactions with people with mental illness were significantly influenced by feeling Secure in the presence of the latter. Low Public and Private Interactions were influenced by older age. CWVs' "experience in providing consultations for mental illness" led to the avoidance of Private Interactions.

Conclusion: CWVs should feel safe when involved in Public or Private Interactions with individuals with mental illness. CWVs reported a preference for a higher level of social distance from people with mental illness.

Key words: attitude, commissioned welfare volunteers, health personnel, mental illness, social distance

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Introduction

The average length of hospitalization in Japanese psychiatric wards is 300 days¹⁾, but this number has been decreasing over time. Meanwhile, psychiatric treatment is shifting from inpatient treatment to community care²⁾. There were 3,924,000 people with mental illness in Japan in 2014, of whom only 313,000 were inpatients, whereas 3,611,000 were outpatients³⁾. In other words, most people with mental illness are community-living outpatients.

The stigma associated with mental illnesses, such as

schizophrenia, among community-dwelling people can deter patients from seeking help and accessing mental health services. Families attempt to solve these problems themselves⁴⁾. The stigma associated with mental illnesses is an international problem⁵⁾, and international comparisons have shown that Japan has a higher rate of stigma associated with mental illnesses than Australia⁶⁾. Further, people in Japan appear to have less tolerance toward people with mental illness, as evidenced by the tendency to maintain a greater social distance from them⁵⁾. Therefore, reducing the stigma associated with mental illnesses is necessary.

Commissioned welfare volunteers (CWVs) from Japan's general citizenry are often contacted as a support system for people with mental illness. The Japanese refer to CWVs as *minsei-iin*⁷⁾. The CWV system was initiated in 1917 and has been in place for over 100 years. It has 229,541 volunteers, characterized as persons who consult and support of the general citizenry⁸⁾. They ensure the safety of older people and those with disabilities, provide multiple consultations⁹⁾, and cooperate with the administration¹⁰⁾. The role of a CWV is legally interpreted as that of a local public officer who provides special services. The prefectural governor recom-

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mends a person recommended by a welfare committee to be appointed as volunteers, and the Ministry of Health, Labour and Welfare (MHLW) commissions them. As volunteers, they cannot be remunerated, and their services are similar to the conduct of social work in the community. When a member of the community experiences a mental illness, CWVs are appointed as counselors. With respect to demographics, among those with a mental illness, 5.3% of those aged below 65 years and 9.2% of those aged over 65 years have stated that they desired to receive counseling from a CWV¹¹. Mental illness comprised 13.6% of the reasons cited for requiring CWV support¹².

Modern society is characterized by diverse media. Negative images of people with mental illness in the media create a negative stigma¹³. As CWVs are not necessarily knowledgeable on mental illnesses and are likely to misunderstand them, their social distance from people with mental illness may increase when they encounter difficulties related to mental illnesses, although the stigma associated with mental illnesses is related to a lack of appropriate knowledge¹⁴. If the social distance between CWVs and people with mental illness increases, the latter will be further isolated, and their access to necessary support will be hindered. A better understanding of how attitudes toward people with mental illness influence social distance can help provide educational material to inform CWVs of their potential biases. Studies have examined the relationship between CWVs and older people¹⁵, but the link between CWVs' attitudes toward mental illnesses and social distance from people with mental illness has not been studied. Therefore, the present study explored the factors influencing CWVs' attitudes toward mental illnesses and examined how their attitudes correlate with their level of social distance from people with mental illness.

Materials and Methods

Participants

A total of 389 CWVs from a city in Japan participated in our study. Anonymous self-administered questionnaires were sent to participants by mail between September and October 2017. The participants were informed of the purpose of the study, assured that their privacy would be protected, and informed that their participation, or lack thereof, would not result in unfair treatment. The Ethics Review Board at Yamaguchi University Graduate School of Medicine, School of Health Sciences, approved the study protocol (Approval number: 482).

Procedures

The survey used in our study documented the participants' demographic characteristics, including sex, age, number of periods for which the respondent had worked as

a CWV (they are appointed for three years per term), job experience (e.g., medical professional, welfare worker, and other), and whether they had experience working as a CWV providing consultations for mental illness (basic attribute).

To assess CWVs' attitude toward mental illness, we used the Image for Mental Illness Scale (IMI) developed by Nakashima and Umetsu¹⁶. The IMI measures respondents' reactions to specific words and is premised on the semantic differential technique¹⁷, in which the score is evaluated using adjective pairs at the ends of the scale. Each item is scored on a seven-point scale. A lower score indicates a relatively more negative image. This scale has a one-factor structure.

To assess social distance from people with mental illnesses, we used the Social Distance Scale (SDS) developed by Hoshigoe, Suwaki, and Jitsunari¹⁸. The SDS is measured using a Likert scale that scored each item on a four-point scale. A higher score indicates a relatively more antagonistic attitude. This scale has a one-factor structure. The journal's editorial office of *Memoirs of Osaka Shin-ai College* and *Japanese Bulletin of Social Psychiatry* approved the translation and use of these scales.

Statistical analyses

We calculated the mean, standard deviation (SD), and number (N) for participants' demographic characteristics. The ceiling and floor effects by a mean \pm 1 SD, skewness and kurtosis, and discriminability using good-poor (G-P) analyses of items were calculated for the items of each scale. We calculated the factor extractions for the IMI and SDS using exploratory factor analysis (EFA). Internal consistency for each factor was confirmed using Cronbach's α coefficient, which should be >0.6 to ensure sufficient internal consistency¹⁹. Next, the *t*-test, one-way analysis of variance (ANOVA), and Pearson's correlation analysis were used to confirm relations between the participants' characteristics and each factor. The relations between factors in IMI and SDS were examined using Pearson's correlation analysis, and the influence of IMI and the basic attributes on SDS were determined using multiple regression analysis. SPSS 24.0 for Windows (IBM, New York, USA) was used for all statistical analyses. The significance level was set to $P < 0.05$ for all analyses.

Results

Characteristics of participants

A total of 286 participants provided written consent to participate in the study (recovery rate: 73.5%). After questionnaires with missing values were excluded (valid response rate: 77.9%), data from 223 participants were analyzed. Table 1 shows the participants' demographic characteristics.

Table 1 Participants' demographic characteristics

	Number (N)/Mean	Percent (%)/SD
Sex		
Male	89	39.9%
Female	134	60.1%
Age	64.49	7.47%
Number of periods for which the respondent had worked as a commissioned welfare volunteer		
First period	84	37.7%
Second period	58	26.0%
Third period over	81	36.3%
Job experience		
Medical profession	7	3.1%
Welfare worker	12	5.4%
Other	204	91.5%
Experience in providing consultations for mental illness as a commissioned welfare volunteer		
Yes	68	30.5%
No	155	69.5%

Characteristics of scale scores

Not all items had the ceiling and floor effects in mean \pm 1 SD. All item scores were classified as one of three groups: upper 25% (high group), medium 50% (middle group), and lower 25% (low group). Next, G–P analysis was used to determine the discriminative power. A significant difference ($P < 0.01$) between groups was confirmed for all items, and discriminative power was demonstrated for each item. A normal distribution was assumed for values of skewness and kurtosis that did not exceed $\pm 2^{20}$. Not all items had skewness that exceeded ± 2 ; however, IMI item numbers 5, 7, 8, and 12 had kurtosis that exceeded ± 2 , and these items were excluded from further analysis (Table 2).

Factor structures of IMI and SDS

We used EFA to identify the factor structures of the IMI and SDS. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity (χ^2) were also performed during this process. We then applied

Table 2 Characteristics of item scores in each scale

	Mean (SD)	Skewness	Kurtosis	P-value
<i>Images for mental disease</i>				
1 Will not recover – Will recover	4.01 (1.37)	0.02	−0.75	<0.001
2 Inactive – Active	3.48 (0.89)	−0.20	0.32	<0.001
3 Dangerous – Safe	3.88 (1.09)	0.57	0.86	<0.001
4 Frightening – Not frightening	4.19 (1.20)	0.80	0.33	<0.001
5 Bad – Good	4.17 (0.92)	1.03	2.65	<0.001
6 Intense – Peaceful	3.83 (0.92)	0.59	0.86	<0.001
7 Cold – Warm	4.08 (0.72)	1.26	4.68	<0.001
8 Hard – Soft	3.87 (0.80)	0.72	2.95	<0.001
9 Complicated – Simple	3.52 (1.08)	0.34	0.53	<0.001
10 Gloomy – Cheerful	3.56 (0.88)	0.72	1.48	<0.001
11 Heavy – Light	3.55 (0.89)	0.53	1.76	<0.001
12 Unclear – Clear	3.49 (0.98)	0.44	1.72	<0.001
13 Dirty – Clean	4.08 (0.84)	1.11	4.18	<0.001
14 Difficult – Easy	3.25 (1.08)	0.30	0.88	<0.001
15 Dark – Bright	3.56 (0.96)	0.18	1.74	<0.001
16 Troublesome – Not troublesome	4.20 (0.99)	1.02	1.62	<0.001
17 Slow – Fast	3.62 (0.76)	−0.57	0.68	<0.001
18 Far – Near	3.87 (0.74)	−0.26	2.71	<0.001
19 Weak – Strong	3.59 (0.87)	−0.38	1.98	<0.001
20 Deep – Shallow	3.66 (0.85)	−0.62	1.28	<0.001
<i>Social distance</i>				
1 What would you do if a social facility which Person A and others will be utilizing were built in the same district as yours?	2.01 (0.60)	−0.01	−0.22	<0.001
2 If you were a hiring manager, would you hire Person A?	2.25 (0.66)	0.04	−0.20	<0.001
3 What would you do if Person A participated in volunteer work in your district?	1.59 (0.59)	0.40	−0.71	<0.001
4 If you owned a vacant house, would you rent it to Person A?	2.83 (0.72)	−0.33	0.10	<0.001
5 What would you do if your child said they wanted to marry Person A?	3.15 (0.70)	−0.46	−0.04	<0.001
6 Would you be able to enjoy work if you worked in the same place as Person A?	2.04 (0.61)	0.47	1.24	<0.001
7 What would you do if someone in your family said they would be dating Person A?	2.90 (0.70)	−0.25	−0.02	<0.001
8 What would you do if Person A was to rent a house and live in your neighborhood?	2.21 (0.71)	0.21	−0.07	$P < 0.001$

SD: standard deviation, P-value for G-P analysis, Absolute values ≥ 0.20 are in boldface.

the maximum likelihood method to extract the factors and performed promax rotation. We used a Kaiser criterion²⁰ to decide the number of factors. Items that showed less than 0.40 in one factor and 0.40 in plural factors were deleted, and EFA was repeated. Tables 3 and 4 summarize the EFA results.

For IMI, the KMO measure of sampling adequacy was 0.88, showing that the EFA was appropriate²². Meanwhile, χ^2 was 1,390.31 ($df = 91$) $P < 0.001$, an acceptable value. The attenuation situation of the three eigenvalues higher than 1.0

was 5.73, 1.72, and 1.30, and factor analysis showed that the number of factors was valid. Three factors with 14 items were extracted. The first factor was named *Understanding*, and it included items related to the understanding of mental illnesses. The second factor was *Secure*, which represented how safe respondents felt in the presence of people with mental illness. The third factor was called *Activity*, which represented the behaviors of people with mental illness. Cronbach's α coefficients for the three factors were 0.85 (*Understanding*), 0.83 (*Secure*), and 0.70 (*Activity*).

Table 3 Factor structure of perception of mental illness among commissioned welfare volunteers

Item No.	Content of items	F1	F2	F3	Communality
F1: Understanding (Cronbach' α coefficient= 0.85); 6 items					
9	Complicated – Simple	0.98	-0.02	-0.26	0.69
14	Difficult – Easy	0.76	0.11	-0.07	0.61
11	Heavy – Light	0.74	-0.10	0.15	0.61
12	Unclear – Clear	0.53	0.14	0.17	0.55
20	Deep – Shallow	0.52	-0.15	0.03	0.22
10	Gloomy – Cheerful	0.47	0.04	0.28	0.51
F2: Secure (Cronbach' α coefficient=0.83); 4 items					
4	Frightening – Not frightening	-0.06	0.95	-0.13	0.75
3	Dangerous – Safe	-0.04	0.85	-0.02	0.67
16	Troublesome – Not troublesome	-0.08	0.65	0.19	0.50
6	Intense – Peaceful	0.39	0.45	-0.06	0.49
F3: Activity (Cronbach' α coefficient=0.70); 4 items					
2	Inactive – Active	-0.19	0.09	0.69	0.39
17	Slow – Fast	-0.03	0.05	0.59	0.35
19	Weak – Strong	0.12	-0.26	0.57	0.33
15	Dark – Bright	0.31	0.18	0.45	0.64
Factor correlation		F1	1.00		
		F2	0.56	1.00	
		F3	0.62	0.44	1.00

F: Factor, Factor loadings with absolute values ≥ 0.40 are in boldface.

Table 4 Factor structure of social distance with people with mental illness among commissioned welfare volunteers

Item No.	Content of items	F1	F2	Communality
F1: Public Interaction (Cronbach α coefficient=0.82); 6 items				
3	What would you do if Person A participated in volunteer work in your district?	0.78	-0.18	0.47
6	Would you be able to enjoy work if you worked in the same place as Person A?	0.74	0.03	0.58
8	What would you do if Person A was to rent a house and live in your neighborhood?	0.63	0.18	0.57
2	If you were a hiring manager, would you hire Person A?	0.63	0.07	0.45
1	What would you do if a social facility which Person A and others will be utilizing were built in the same district as yours?	0.62	0.03	0.40
4	If you owned a vacant house, would you rent it to Person A?	0.40	0.30	0.39
F2: Private Interaction (Cronbach α coefficient=0.85); 2 items				
5	What would you do if your child said they wanted to marry Person A?	-0.08	0.95	0.81
7	What would you do if someone in your family said they would be dating Person A?	0.02	0.80	0.66
Factor correlation		F1	1.00	
		F2	0.61	1.00

Factor loadings with absolute values ≥ 0.40 are in boldface.

For SDS, the KMO measure of sampling adequacy was 0.84, showing that the EFA was appropriate²². Meanwhile, χ^2 was 723.05 ($df = 28$) $P < 0.001$, an acceptable value. The attenuation situation of the two eigenvalues higher than 1.0 was 4.04 and 1.11, and factor analysis showed that the number of factors was valid. Two factors with eight items were extracted. The first factor was named *Public Interactions with Mental Illnesses*, (hereinafter *Public Interactions*), which represented the relationships between the public and people with mental illness. The second factor was *Private Interactions with Mental Illness*, (hereinafter *Private Interactions*), which represented the relationships between private or individual members of the community and people

with mental illness. Cronbach's α coefficients for the two factors were 0.82 (Public Interactions) and 0.85 (Private Interactions).

Relations between basic attributes and each factor

As shown in Table 5, Understanding, Public Interactions, and Private Interactions were significantly affected by age. CWVs' Private Interactions were significantly affected by experience in providing consultations for individuals with mental illness.

Table 5 Relations between characteristics and each scale

	Understanding				Secure				Activity			
	Mean	SD	T/F-value/ r	P-value	Mean	SD	T/F-value/ r	P-value	Mean	SD	T/F-value/ r	P-value
Sex												
Male	3.59	0.72	1.51	0.13	4.08	0.84	0.69	0.49	3.46	0.62	-1.94	0.05
Female	3.44	0.73			3.99	0.87			3.63	0.63		
Age (Mean=64.49, SD=7.47)	3.50	0.73	0.24	P<0.001	4.03	0.86	0.08	0.216	3.56	0.63	-0.02	0.82
Number of periods for which the respondent had worked as a commissioned welfare volunteer												
First period	3.46	0.74	0.41	0.67	3.92	0.79	1.09	0.34	3.61	0.65	0.75	0.47
Second period	3.48	0.74			4.05	0.83			3.48	0.58		
Third period over	3.56	0.70			4.12	0.94			3.57	0.64		
Job experience												
Medical profession	3.26	0.62	1.72	0.18	3.86	0.83	0.18	0.83	3.61	0.63	0.44	0.64
Welfare worker	3.18	0.76			4.10	1.04			3.40	0.77		
Other	3.53	0.72			4.03	0.85			3.57	0.62		
Experience in providing consultations for mental illness as a commissioned welfare volunteer												
Yes	3.50	0.90	0.03	0.97	4.20	1.04	1.81	0.07	3.47	0.81	-1.21	0.23
No	3.50	0.64			3.95	0.76			3.60	0.53		

	Public Interaction				Private Interaction			
	Mean	SD	T/F-value/ r	P-value	Mean	SD	T/F-value/ r	P-value
Sex								
Male	2.14	0.43	-0.3	0.76	3.10	0.62	1.33	0.19
Female	2.16	0.51			2.98	0.67		
Age (Mean=64.49, SD=7.47)	2.16	0.48	0.14	0.04	3.02	0.65	0.21	0.002
Number of periods for which the respondent had worked as a commissioned welfare volunteer								
First period	2.21	0.49	1.60	0.20	2.99	0.68	0.23	0.80
Second period	2.06	0.40			3.02	0.59		
Third period over	2.17	0.51			3.06	0.67		
Job experience								
Medical profession	2.24	0.68	0.54	0.58	3.00	0.82	0.01	0.99
Welfare worker	2.03	0.56			3.00	0.74		
Other	2.16	0.47			3.03	0.64		
Experience in providing consultations for mental illness as a commissioned welfare volunteer								
Yes	2.17	0.51	0.27	0.79	3.15	0.64	1.98	0.048
No	2.15	0.46			2.97	0.65		

SD: standard deviation.

Relations among each factor

As shown in Table 6, we found significant correlations between Understanding and Secure, Activity and Private Interactions, Secure and Activity, and Public Interactions and Private Interactions, $P < 0.05$.

CWVs' attitudes toward people with mental illness influencing their preferences for levels of social distance

As shown in Table 7, we selected age as explanatory variable for Public Interactions, and age and experience in providing consultations for mental illness as a CWV for Private Interactions, by confirming the significance levels (Table 5). The effects of CWVs' attitudes toward people with mental illness on their preferred level of social distance were confirmed with multiple regression analysis. Age and the factor Secure had significant effects on Public Interactions, whereas age, experience in providing consultations for mental illness as a CWV, and Secure had significant effects on Private Interactions ($P < 0.05$).

Discussion

Participants' characteristics

Nationally, in terms of the CWVs' sex ratio, mean age, and previous experience, 39.8% were male, and 60.2% were female²³; the mean age was 66.1 years (National Welfare Officer and Children's Committee Federation)²⁴, and approximately 60% had been selected for a second term²⁵. Our data were considered to have little error with these.

In terms of job experience, 8.5% of the CWVs indicated being medical professionals. In terms of job experience, 8.5% of the CWVs indicated being medical professionals. Of the CWVs, 30.5% had experience in providing consultations for mental illness, which was higher than the 14.5% found in previous data¹¹.

Examination of extracted factors

Three factors were extracted for IMI—Understanding, Secure, and Activity—and content validity was confirmed. Patients with mental illness were perceived as being “difficult patients” in terms of mental health²⁶. This perception may be the effect of the factor Understanding. The public may exaggerate both the strength of the association between

Table 6 Pearson's correlation coefficients for each factor

Explanatory variables	1	2	3	4	5
1 Understanding	1.00	–	–	–	–
2 Secure	0.47**	1.00	–	–	–
3 Activity	0.49**	0.35**	1.00	–	–
4 Public Interaction	–0.09	–0.44**	–0.01	1.00	–
5 Private Interaction	–0.15*	–0.35**	–0.24**	0.54**	1.00

* $P < 0.05$, ** $P < 0.01$.

Table 7 Effects of images of people with mental illness on social distance of commissioned welfare volunteers

Explanatory variables	Objective variable					
	Public Interaction			Private Interaction		
	β	t -value	P -value	β	t -value	P -value
Age	0.16	2.60	0.01	0.23	3.57	<0.001
Experience in providing consultations for mental illness as a commissioned welfare volunteer	–	–	–	–0.15	–2.46	0.01
Understanding	0.09	1.07	0.28	–0.01	–0.09	0.93
Secure	–0.54	–7.76	<0.001	–0.34	–4.65	<0.001
Activity	0.14	1.82	0.07	–0.10	–1.33	0.18
R	0.49			0.46		
R^2	0.24			0.21		
Adjusted R^2	0.23			0.19		
F -value	17.40			11.63		
P -value	<0.001			<0.001		

β : Standardized coefficient β ; Multiple regression analysis adjusted for Age and Experience in providing consultations for mental illness as a commissioned welfare volunteer.

mental illnesses, violence, and their own personal risk²⁷), which may be affected by Secure. The Positive and Negative Syndrome Scale has been used to evaluate the positive and negative symptoms associated with schizophrenia and other disorders²⁸), and mental illnesses encompass both positive and negative symptoms. People observe certain behaviors in those with mental illness and attribute such behaviors to their symptoms. This tendency may be an effect of the factor, Activity, for people with mental illness. Cronbach's α coefficients for the three factors exceeded the acceptable level ($\alpha > 0.60$).

For SDS, two factors—Public Interactions and Private Interactions—were extracted, and content validity was confirmed. Cronbach's α coefficients for the two factors exceeded the acceptable level ($\alpha > 0.60$).

CWVs' attitudes toward people with mental illness influenced preferences for levels of social distance

Public and Private Interactions with people with mental illness were influenced by the factor Secure. Low Secure scores were associated with high public and private social distance scores. As mentioned above, members of the public tend to exaggerate both the strength of the association between mental illnesses and violence and their own personal risk²⁷). Abuse may generally cause social estrangement²⁹). Further, intimacy in the community relates to social distance with people with mental illness³⁰), and if CWVs feel unsafe around people with mental illness, they may avoid them. Educational intervention is required to increase CWVs' feelings of safety.

Public and Private Interactions in relation to mental illnesses were influenced by age. Older age meant high scores for Public and Private Interactions. This finding was consistent with the those of a previous study³¹), in which older people are reported to experience "rejection" for mental illness, and volunteer activities reduce "rejection" for reasons of mental illness³²). Such interactions promote familiarity with mental illness, which may reduce prejudicial attitudes³³). CWVs may benefit from participating in volunteer activities with people with mental illness.

CWVs' experience in providing consultations on mental illness affected Private Interactions. From this, we could infer that CWVs prevented Private Interactions. These findings were contrary to those reported in previous studies. As contact with people with mental illness increases, the perceived danger and desired social distance between them and people with mental illnesses generally decrease³⁴), and frequent interactions tend to reduce the stigma associated with persons with mental illness³⁵). Compared with the general population, mental health professionals have significantly more positive attitudes toward mental illnesses³⁶), which may be due to their greater knowledge of mental ill-

ness. Meanwhile, CWVs are not experts in mental health care, and without a professional background that required them to deal with mental illnesses, they might have negative attitudes toward people with mental illness. CWVs who do not have previous experience of interacting with people with mental illness thus require the appropriate educational intervention.

Limitations

The cross-sectional design of this study precludes causal inferences. A qualitative study should be conducted to explore the topic in depth and confirm the present findings.

Conclusion

This study revealed new findings, as follows. The IMI scale's three-factor structure consisted of the factors of Understanding, Secure, and Activity, and the SDS's two-factor structure included Public Interactions and Private Interactions; these were not found in previous studies. Both Public and Private Interactions with people with mental illness were significantly influenced by the perceived feeling of being Secure in relation to people with mental illness. CWVs need to be educated on how they can feel safe in Public and Private Interactions with people with mental illness.

Further, experience in providing consultations on mental illness can foster better Private Interaction. Older age in CWVs was coupled with a preference for greater social distance in Public and Private Interactions with people having mental illness. Even older CWVs and those who have experience in interacting with people with mental illness require educational interventions. Finally, as most CWVs are not mental health professionals, these findings may be used to provide educational interventions tailored for welfare volunteers who are also general citizens.

Conflict of interest: The authors declare no conflict of interest.

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