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SHORT RESEARCH ARTICLE: Aspects of the volunteering experience associated with well-being in older adults

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Keywords: formal volunteering; psychological health; well-being; older adults.

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ABSTRACT

Issues addressed: While the psychological health benefits of older people's engagement in formal volunteering are well-documented, there is limited research assessing how volunteering may produce these favourable outcomes. To guide the development of volunteer positions that optimise outcomes, this study examined (i) which aspects of the volunteering experience are most strongly associated with favourable psychological health among older adults and (ii) whether relationships between these aspects and psychological outcomes are moderated by sociodemographic characteristics.

Methods: A sample of 293 volunteers aged 60+ years (69% female, mean age=73.33 years) completed measures assessing their engagement in volunteering, various aspects of their volunteer experience, and their psychological health.

Results: Being adequately appreciated for one's contribution, perceived social and mental intensity of the volunteer role, and believing that others benefit from one's volunteering efforts were found to be associated with higher levels of psychological health.

Conclusions: Ensuring the contributions of volunteers are explicitly recognised, providing opportunities for engagement in social and cognitive activities, and informing volunteers of the

benefits others experience constitute potential means of enhancing volunteer outcomes and may assist with volunteer retention.

So what? This study builds upon the limited research assessing which aspects of the volunteering experience are most strongly associated with favourable psychological health among older adults. The findings point to the potential importance of four specific aspects of the volunteer experience in enhancing psychological health outcomes.

Keywords: formal volunteering; psychological health; well-being; older adults.

INTRODUCTION

Participation in formal volunteering has the potential to facilitate healthy ageing [1]. Defined as non-mandatory and unremunerated work undertaken via an affiliation with an organisation [2, 3], formal volunteering has been found to be especially beneficial for older adults [4]. An extensive body of evidence has linked participation in formal volunteering with positive outcomes across multiple psychological domains, including higher levels of psychological well-being, greater self-esteem, and fewer depressive symptoms [for a review see 5].

While the benefits of engagement in formal volunteering are well-documented, there is limited research assessing how volunteering may come to produce these favourable outcomes. Numerous aspects of the volunteering experience have been proposed to be important to psychological outcomes, including the number of hours worked; the amount of physical, social, and cognitive activity involved in the volunteering role; the extent to which the work benefits others; and whether the volunteer feels appreciated and valued [6-10]. The available evidence for each of these is outlined below.

Evidence suggests the presence of a curvilinear relationship between hours spent volunteering and psychological well-being. Increasing hours of volunteering have been found to have a positive effect on outcomes up to a certain point, with higher levels of involvement then resulting in lower levels of well-being [11-13]. Analyses suggest that engagement in at least 100 hours of

volunteering a year, or approximately 2-3 hours a week, produces optimal psychological health outcomes [10-13].

The social model for health promotion developed by Fried et al. [6] posits that volunteering produces positive outcomes because it increases volunteers' engagement in social, physical, and cognitive activity. In terms of social activity, engagement in formal volunteering has been linked with social connectedness; older volunteers have been found to have more people they could turn to for help compared to their non-volunteering counter-parts [6, 14]. In terms of physical activity, previous research examining the Experience Corps program in the United States found that older participants reported being more active compared to those in a control group [6, 15, 16]. The increase in physical activity was largely attributed to the additional manual work, walking, and commuting involved in the adoption of a volunteer position [6, 15]. With respect to cognitive activity, recent longitudinal research conducted in adults aged 51+ years found that formal volunteering was associated with higher levels of cognitive functioning over time, which was attributed to engagement in mental tasks while volunteering [17].

Only two studies assessing the association between volunteers' beliefs about the extent to which their volunteer work benefits others and their own psychological health could be located. One of these studies found that the extent to which an individual believed they 'mattered' (e.g., were relied upon by others) mediated the effects of volunteering on psychological well-being [4]. By contrast, the other study found that older adult volunteers who perceived greater benefit to others from their volunteer work did not report higher levels of mental health [12]. Given these limited and mixed findings, further research examining the degree to which older adults' believe that their volunteer work is of benefit to others is associated with psychological health outcomes appears warranted.

Finally, previous research has found that older adult volunteers who feel appreciated for their volunteering report higher quality of life, greater life satisfaction, and lower levels of depression compared to those who do not feel appreciated [7, 8]. Those who feel underappreciated or taken for granted report increased levels of frustration, burnout, and lack of satisfaction with

volunteering [18, 19]. These outcomes suggest that feeling appreciated may be a mechanism by which volunteering results in favourable psychological health outcomes.

Of further importance is whether specific aspects of the volunteering experience benefit some segments of the older adult population over others. The presence of moderating effects may at least partially explain the inconsistent results reported in previous studies. However, given the limited research assessing the mechanisms by which volunteering may result in favourable psychological outcomes, there is a corresponding lack of research assessing whether volunteers' demographic characteristics may moderate the relationship between aspects of volunteering and favourable outcomes. Such research is needed to help volunteer organisations determine whether certain aspects of their volunteer program are universally beneficial or if targeted approaches that match particular demographic groups to positions with specific characteristics are required.

Previous research assessing moderators of the volunteering/well-being relationship offers a valuable starting point from which to identify potentially relevant factors. This work suggests that participation in volunteering may not be equally beneficial to all individuals [12, 20]. However, contradictory results have been observed, with some studies finding that engagement in volunteering is especially beneficial for those who live alone or have low levels of social interaction [21, 22], and others finding the opposite [13, 22, 23]. Evidence relating to gender, age, and education is limited, with only three identified studies examining some or all of these moderators [20, 24, 25]. Among those studies examining gender [20, 24] and age [24, 25], no effects of either were observed. Results relating to education were mixed, with one study [24] finding that those with lower levels of education benefit most from volunteering and another [20] finding no effect of educational attainment.

Present study

The specific conditions of volunteering that produce favourable psychological outcomes have been the subject of little research. Such information is needed to identify which aspects of formal volunteering are most associated with enhanced psychological health among older adults to enable organisations to ensure their volunteer positions are characterised by these aspects to the greatest extent possible. In light of the aforementioned gaps in the literature, the present study

sought to examine (i) which aspects of the volunteer experience are most strongly associated with a range of favourable psychological health outcomes and (ii) whether the relationships between these aspects and outcomes are moderated by volunteers' sociodemographic characteristics.

METHODS

Sample and recruitment

Participants were 293 volunteers aged 60 - 90 years (mean age = 73.33 years, SD = 6.39) residing in Perth, Western Australia. The sample was 69% female and 38% of participants had a tertiary qualification. Recruitment occurred using a variety of methods including (i) flyers placed at senior citizen centres, retirement villages, and governmental organisations frequented by older adults; (ii) radio and newspaper advertising; and (iii) approaching potential participants at shopping centres and seniors' events. To be eligible for the study, participants had to be aged 60+ years, fully retired, and have engaged in formal volunteering in the preceding 12 months.

Measures and procedure

After providing informed consent, participants completed either online or hard copy versions of the measures described below, depending on their preference. The study received ethics approval from a university Human Research Ethics Committee.

Outcome variables

Participants rated their overall quality of life on a scale of 0 (no quality of life) to 100 (perfect quality of life) using the Global Quality of Life Scale [26]. Purpose in life and personal growth were assessed using the relevant 14-item subscales of Ryff's Psychological Well-Being Scales [27]. Items such as "For me, life has been a continuous process of learning, changing, and growth" and "I have a sense of direction and purpose in life" were answered on a scale of 1 (strongly disagree) to 6 (strongly agree). Depressive symptomatology was assessed using the 20-item Center for Epidemiological Studies Depression Scale [28]. Participants responded to items such as "I felt sad" on a scale of 0 (rarely or none of the time) to 3 (most or all of the time). Psychological well-being was assessed using the 14-item Warwick-Edinburgh Mental Well-

Being Scale [29]. Items such as “I’ve been feeling cheerful” were answered on a scale of 1 (none of the time) to 5 (all of the time).

The 10-item Rosenberg Self-Esteem Scale was used to assess self-esteem, with participants answering items such as “On the whole, I am satisfied with myself” on a scale of 0 (strongly disagree) to 3 (strongly agree) [30]. The 10-item General Self-Efficacy Scale was used to assess self-efficacy; participants answered items such as “I can always manage to solve difficult problems if I try hard enough” on a scale of 1 (not at all true) to 4 (exactly true) [31].

Satisfaction with life was assessed using a single item adapted from Van Willigen [13]: “All things considered, how satisfied are you with your life as a whole these days?” (1 = very satisfied to 5 = very dissatisfied; reverse scored for analyses).

Independent variables

Participants were asked to indicate how many hours of volunteering they engaged in per week on average over the last 12 months (open response option). For analysis purposes, a quadratic term was created and used in conjunction with the linear term to examine the curvilinear relationship between hours spent volunteering and psychological health. Perceived intensity of the (i) physical, (ii) social, and (iii) mental activity involved in their volunteer work was rated by participants on scales of 1 (very low) to 5 (very high). Participants were also asked to report on (i) the degree to which they believe they receive adequate appreciation from others for their volunteer work (1 = strongly agree to 4 = strongly disagree; reverse scored for analyses) and (ii) how better off they believe others are as a result of their volunteering (1 = not better off to 4 = a great deal better off). Finally, participants indicated their gender (male, female), age (open response), highest educational qualification (no formal schooling/primary school, high school, technical/trade certificate, undergraduate university degree, postgraduate university degree), and living arrangement (live alone, live with spouse/partner, live with other family, other; categorised into lives alone, lives with others).

Statistical analyses

A series of separate linear regressions ($n = 63$) was conducted to determine which aspects of the volunteering experience were most strongly associated with the assessed psychological

outcomes. Moderation analyses were conducted using the PROCESS macro in SPSS to determine if the demographic variables of gender (categorical), age (continuous), level of education (continuous), or living alone (categorical) moderated the relationship between each of the independent variables (i.e., aspects of the volunteering experience) and each of the dependent variables (i.e., psychological outcomes). For the linear regression analyses, a Bonferroni-adjusted alpha level of .007 was used to control for the family-wise error rate. For the moderation analyses, a Bonferroni-adjusted alpha level of .0018 was adopted. These alpha levels were based on the number of analyses conducted for each dependent variable ($n = 7$ for the linear regression analyses and $n = 28$ for the moderation analyses).

RESULTS

Descriptive analyses

Descriptive statistics for the independent and dependent variables under investigation are presented in Table 1. On average, participants reported volunteering for just over six hours per week. They rated the physical intensity of their volunteering role as low to average and the mental and social intensity of their volunteering role as average to high. Participants typically agreed or strongly agreed that they received adequate appreciation from others and their volunteer work benefited others.

Insert Table 1 about here

Relationship between aspects of the volunteer experience and psychological health

Table 2 presents standardised results from the regression analyses assessing the relationships between various aspects of the volunteering experience and the tested psychological outcomes. Results from Omnibus F Tests, unstandardised parameter estimates, standard errors, 95% confidence intervals, and R^2 values are presented in the online supplementary materials (Tables S1 and S2). Receiving adequate appreciation from others emerged as the most important of the independent variables, and was favourably associated with all but one of the nine psychological outcomes. Higher perceived social and mental intensity of the volunteer role and perceiving that others benefited from the volunteer work conducted were next most important, with each found

to be favourably associated with six of the nine dependent variables. Perceived physical intensity of the volunteer role and hours of volunteering were associated with fewer than two dependent variables.

Insert Table 2 about here

Moderation analyses

Gender, age, education, and living arrangement were not found to moderate any of the relationships between the independent and dependent variables at the Bonferroni-adjusted alpha level of $p = .0018$.

DISCUSSION

To advance understanding of the mechanisms by which participation in formal volunteering enhances psychological health among older adults, the present study examined (i) which aspects of the volunteer experience are most strongly associated with a range of favourable psychological health outcomes and (ii) whether the relationships between these aspects and outcomes are moderated by volunteers' sociodemographic characteristics. Participants' perceptions of (i) the degree of appreciation they receive from others for their volunteering efforts, (ii) the intensity of the social activity involved in the volunteering role, (iii) the intensity of the mental activity involved in the role, and (iv) whether others benefited from one's volunteer work were the most important aspects identified, with each favourably associated with six or more of the nine outcomes under investigation. These results have the potential to inform how organisations could adapt their positions and volunteer management practices to incorporate as many of these aspects as possible into their volunteer programs to potentially improve outcomes for volunteers, enhance retention, and facilitate recruitment via positive word of mouth.

Perceiving greater appreciation from others for the volunteer work conducted was found to be significantly and moderately associated with eight of the nine outcomes. This supports previous quantitative research finding that volunteers who feel appreciated for their volunteering report higher quality of life and lower levels of depression compared to those who do not feel

appreciated [7, 8]. The results also complement qualitative research in which feeling appreciated and needed was found to facilitate a sense of purpose and accomplishment among older adult volunteers [32]. The present study extends these previous findings by linking appreciation to a broader range of psychological outcomes and thus highlights the importance of recognising the time, energy, skills, and resources volunteers contribute to their roles. Such recognition is noted to be best practice by Volunteering Australia in their National Standards for Volunteering Involvement [33]. In addition to producing positive psychological health outcomes, demonstrated appreciation may serve to increase the quality of the volunteering experience and facilitate volunteer retention [34, 35]. Specific mechanisms for recognition could include tracking volunteers' service and recognising milestones with certificates, pins, or letters from management [34] and organising regular activities such as social outings or catered lunches and morning teas to which volunteers are invited [36].

Participants' perceptions of the extent of social activity, mental activity, and societal benefit resulting from their volunteering were also found to be moderately associated with most of the tested psychological outcomes. The finding related to social intensity supports previous research suggesting that volunteering positions have the potential to mitigate the social-role losses, social isolation, and loneliness that may accompany ageing through their promotion of social connectedness and bonding [37-41]. In addition to providing recognition of volunteers' efforts, the aforementioned outings and events could also be used as a means of increasing social connectedness by creating opportunities for social interaction.

The finding related to mental intensity supports previous research highlighting the importance of volunteer roles that provide the opportunity for cognitive activity [6]. The results of the present study extend these previous findings by suggesting that engagement in higher-intensity cognitive tasks has the potential to enhance numerous psychological health outcomes. In terms of benefiting others, the present study adds to the very limited body of literature examining the association between the perception that one's volunteer work is of benefit to others and psychological outcomes. The favourable results suggest organisations may wish to provide their volunteers with regular updates detailing the positive outcomes of their work. This is recognised as best practice [33], and can signal to volunteers that their work is appreciated and valued.

A curvilinear relationship was observed between hours of volunteering and purpose in life. Significant linear relationships were not observed between hours of volunteering and any of the outcomes under investigation. These results indicate that for most of the assessed outcomes, it is engagement in volunteering per se that is associated with psychological benefits rather than larger amounts of engagement. From a communications perspective, more older adults may be attracted to volunteering if advised that only modest amounts of engagement are needed to experience psychological health benefits [12]. This information may be particularly important to older adults who fear the commitment and time involved with accepting a volunteer position and wish to avoid role obligation [12, 42-44].

Of note is the finding that perceived physical intensity of the volunteer role was only associated with one of the nine outcomes. This is likely due to the outcomes assessed being psychological in nature. Research assessing the aspects of volunteering associated with favourable physical health outcomes is warranted.

Moderating characteristics

When considering the characteristics of older adult volunteers that may amplify or attenuate the relationship between aspects of the volunteering experience and psychological outcomes, moderating effects of gender, age, level of education, and living arrangement were not observed at the Bonferroni-adjusted alpha level. These findings suggest that the aspects of the volunteering experience assessed in the present study are not differentially associated with outcomes among certain demographic groups, which indicates that volunteer organisations need not tailor aspects of the volunteer experience to specific segments of the older adult population.

Limitations and future directions

There were some limitations to the present study. First, data were cross-sectional in nature, limiting the ability to make causal inferences. Second, well-being outcomes for older adult volunteers are likely to be affected by other aspects of the volunteer experience that were not assessed in this study, such as the organisational environment (e.g., provision of training and learning opportunities, governance structures, and clarity of volunteer role descriptions) [45, 46].

These aspects of the volunteer experience were not assessed to minimise fatigue associated with completing a lengthy survey, but are worthy of examination.

Third, participants self-selected into the study, and this non-probability-based sampling technique may have resulted in a biased sample. For example, females were over-represented; however, this is likely due to older females being more likely to engage in volunteering than older males [47]. Fourth, engagement in informal volunteering was not assessed but may interact with various aspects of the volunteering experience to influence outcomes. For example, larger amounts of time spent engaging in formal volunteering may be associated with negative outcomes among volunteers who also spend time caring for others and therefore occupy multiple roles. Research assessing the moderating effect of engagement in informal volunteering is needed to elucidate these potential relationships. Finally, the moderation analyses conducted in the present study examined each demographic variable in isolation. Given individuals occupy multiple demographic categories, using a qualitative or mixed-methods approach to explore the added contribution of socio-demographic factors in the relationships identified in the present study is warranted.

CONCLUSIONS

The present study builds upon the limited research assessing which aspects of the volunteering experience are most strongly associated with favourable psychological health among older adults and potential moderators of these relationships. The observed results indicate that being adequately appreciated for one's volunteering, the perceived social and mental intensity of a volunteer role, and believing that others benefit from one's efforts have the potential to enhance the positive psychological health outcomes associated with participating in volunteering. The findings point to interventions that can be implemented to maximise the benefits experienced by older adult volunteers. Such interventions include explicitly recognising the contribution of older adult volunteers, ensuring there are ample opportunities for social interaction and cognitive engagement, and informing volunteers of the benefits others experience as a result of volunteering efforts.

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TABLE 1 Descriptive statistics for the independent and dependent variables (n = 293)

Independent variables	M (SD)	Scale range	Dependent variables	M (SD)	Scale range	α
Hours spent volunteering (average per week)	6.39 (5.92)	open-ended	Quality of life	81.52 (10.93)	0 – 100	n/a
Physical intensity	2.80 (0.95)	1 – 5	Personal growth	71.55 (9.24)	14 – 84	0.84
Mental intensity	3.51 (0.86)	1 – 5	Purpose in life	69.02 (10.91)	14 – 84	0.86
Social intensity	3.54 (0.82)	1 – 5	Depression	8.20 (7.44)	0 – 60	0.85
Appreciation	3.46 (0.55)	1 – 4	Self-esteem	24.14 (4.68)	0 – 30	0.88
Benefiting others	3.16 (0.77)	1 – 4	Psychological well-being	55.68 (8.27)	14 – 70	0.93
			Social provisions	80.73 (10.04)	24 – 96	0.92
			Self-efficacy	32.40 (4.45)	10 – 40	0.91

	Satisfaction with life	4.24 (0.77)	1 – 5	n/a
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Note. α = Cronbach's alpha. For all independent and dependent variables, the higher the score the higher the participants rated the relevant construct.

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TABLE 2 Relationships between various aspects of the volunteering experience and psychological health outcomes

	Quality of life		Personal growth		Purpose in life		Depression		Self-esteem		Psychological well-being		Self-efficacy		Social provision		Satisfaction with life	
	β	p	β	p	β	p	β	p	β	p	β	p	β	p	β	p	β	p
Appreciation	.21	< .001	.32	< .001	.25	< .001	-.19	.001	.30	< .001	.28	< .001	.22	< .001	.25	< .001	.09	.123
Social intensity	.10	.095	.23	< .001	.21	< .001	-.10	.085	.18	.002	.20	< .001	.23	< .001	.22	< .001	.14	.020
Mental intensity	.09	.134	.21	< .001	.18	.003	-.08	.164	.23	< .001	.20	< .001	.21	< .001	.20	< .001	.07	.273
Benefiting others	.11	.075	.28	< .001	.30	< .001	-.08	.197	.28	< .001	.21	< .001	.23	< .001	.21	< .001	.07	.236
Physical intensity	.01	.816	.11	.063	.10	.111	-.03	.578	.06	.305	.15	.010	.16	.006	.08	.188	.05	.418
Hours (linear)	.15	.019	.02	.814	.08	.233	-.04	.489	.01	.835	.06	.375	.11	.080	.05	.460	.08	.185
Hours (curvilinear)	-.23	.175	-.09	.563	-.47	.004	.24	.141	-.26	.102	-.20	.229	-.30	.058	.01	.932	-.19	.243

Note. Results significant at Bonferroni-adjusted alpha level of .007 presented in bold.