Formal Volunteering as a Protective Factor for Older Adults' Psychological Well-Being

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Objectives. Guided by interactional role theory and employing a resilience framework, this study aimed to investigate whether formal volunteering protects older adults with more role-identity absences in major life domains (partner, employment, and parental) from poorer psychological well-being.

Methods. We used data from 373 participants, aged 65–74, in the 1995 National Survey of Midlife Development in the U.S. (MIDUS). Multivariate regression models estimated the effects of major role-identity absences, formal volunteering, and the interaction between major role-identity absences and volunteering on respondents' negative affect, positive affect, and purpose in life.

Results. Participants with a greater number of major role-identity absences reported more negative affect, less positive affect, and less purpose in life. Being a formal volunteer was associated with more positive affect and moderated the negative effect of having more major role-identity absences on respondents' feelings of purpose in life.

Discussion. Consistent with previous studies, findings indicate that having more role-identity absences constitutes a risk factor for poorer psychological well-being. Results further demonstrate that being a formal volunteer can protect older adults with a greater number of major role-identity absences from decreased levels of purpose in life. The findings suggest that associations between volunteering and psychological well-being might be contingent upon the volunteer's role-identity status and the dimension of psychological well-being examined.

V OLUNTEERING is an increasingly popular activity among older adults in the United States. A growing emphasis on staying active in later years, a widespread cultural value of volunteering, and rising income and educational levels among the aged have led to more older adult volunteers over the last few decades (Chambre, 1993). Much of the current societal enthusiasm for volunteering in later adulthood focuses on the mutual benefits of such activity, namely, that older adults have the availability and ability to assist others and that volunteering provides older adults with needed constructive activities and productive roles (e.g., Rouse & Clawson, 1992).

Research on volunteering and well-being suggests that formal community involvement, indeed, is beneficial for older adults' well-being. Previous studies have found that volunteering is associated with better self-health ratings (Morrow-Howell, Hinterlong, Rozario, & Tang, 2003), increased life satisfaction (Van Willigen, 2000), decreased mortality (Musick, Herzog, & House, 1999; Shmotkin, Blumstein, & Modan, 2003), higher levels of contentment (Jirovec & Hyduk, 1998), as well as lower levels of functional dependence and depressive symptomatology (Morrow-Howell et al., 2003). Researchers also have suggested that volunteering might have differential benefits on well-being according to subgroup variations within the older adult population. For example, Musick and colleagues (1999) found that volunteering has a greater protective effect on mortality for older adults with lower levels of informal social contact relative to the effect for older adults with higher levels of informal social contact. Overall, however, evidence for contingent effects of volunteering on well-being has been limited and inconsistent (Morrow-Howell et al., 2003), and few studies have investigated the extent to which volunteering might be associated with unique advantages for different dimensions of psychological well-being.

The current study aimed to advance understanding of volunteering and well-being by focusing on the possibly contextual and dimension-specific advantages of older adults' formal volunteer activities. We draw on a large body of empirical and theoretical work that identifies role-identity absences in major life domains to be a risk factor for older adults' well-being; this literature suggests that lacking partner, employment, and parental role identities-independently and cumulatively—is adversely associated with older adults' wellbeing (Coleman, Antonucci, & Adelmann, 1987; Hong & Seltzer, 1995; Moen, Dempster-McClain, & Williams, 1992; Rushing, Ritter, & Burton, 1992; Sieber, 1974; Verbrugge, 1983). Guided by interactional role theory and using a resilience framework, we conceptualize being a formal volunteer as a roleidentity that might moderate the association between an older adult's accumulation of major role-identity absences and their psychological well-being.

Theoretical and Empirical Background

Interactional role theory.—Gerontologists often draw on role theories in their investigations of volunteering and wellbeing (Morrow-Howell et al., 2003). Our study was guided by interactional role theory—a framework outlined by Styrker and Statham (1985) that integrates classic symbolic interactionism and traditional role theory. Interactional role theory posits that people in society occupy a number of social positions. These positions are associated with behavioral expectations for the social actors occupying them, regardless of the actors' individual personalities, and become roles (Sieber, 1974). When a person internalizes a positional designation, which is

gained through interactions in role relationships, a role-identity is formed, and role-identities collectively form one's self (Burke & Tulley, 1977).

The relation between role-identities and well-being constitutes a classic theme in the social sciences. Durkheim's (1979) notion of "anomie," or the malaise resulting from rolelessness and separation from a larger social order, attests to early ideas about the linkages between roles, identity, and wellbeing. Likewise, Turner (1978) considered role enactment to be a germinal process through which people validate their self and gain esteem. Thoits (1983) further postulated that roles provide meaning, guidance, direction, and purpose for individuals' lives, thereby helping persons to avoid negative mental health and disorganized behavior. Finally, Bronfenbrenner (1979) explained that because roles are rooted in both people's microand macro-social worlds, they assert a powerful influence over how a person acts, is treated, relates to others, thinks, and feels.

Interactional role theory has guided research revealing that volunteering holds greater psychological and physical health advantages for older, as opposed to younger, adults (Van Willigen, 2000). Volunteering might hold more meaning for older adults, because they are more commonly missing other major role-identities such as paid employment and marital role identities. If this were the case, older adults who experience a greater number of major role-identity absences would derive greater psychological advantages from volunteering than older adults who experience fewer major role-identity absences.

Major role-identity absences and well-being in later adulthood.—Research on marital, parental, and employment status suggests that an absence in any one of these major roles is associated with negative psychological outcomes (Gove, Style, & Hughes, 1991; Kim & Moen, 2002; Marks, Bumpass, & Jun, 2004; Moen, 1996; Prigerson et al., 1995; Stroebe, Stroebe, & Schut, 2001; Umberson and Gove, 1989). Additionally, research has demonstrated that having fewer of these three major role-identities is negatively associated with well-being; many role-identity absences is a risk factor for poorer mental health (Coleman et al., 1987; Hong & Seltzer, 1995) and physical health (Rushing et al., 1992; Verbrugge, 1983). A number of studies have examined the association between wellbeing and role-identity absences by considering the parental, partner, and employment role-identities together with others, such as being a volunteer, relative, friend, group member, neighbor, homemaker, grandparent, and student. Although occupying multiple roles has the potential to create conflicting and overwhelming demands for an individual's behavior (Goode, 1960), overall, studies on multiple roles have indicated that a larger number of role-identities is associated with better physical and mental health (Adelmann 1994a, 1994b; Miller, Moen, & Dempster-McClain, 1991; Pietromonaco, Manis, & Frohardt-Lane, 1986; Thoits, 1986).

Although research has addressed the cumulative effects of role-identities on well-being, little research has investigated the extent to which nonwork and nonfamily sources of role-identity, such as volunteering, interact with partner, parental, and employment role-identity absences (i.e., major role-identity absences) to influence well-being. Investigating these interactions is important for creating a more nuanced understanding of processes that promote psychological well-being in later

adulthood, especially as individuals spend an increasing number of adult years in retirement (Kinsella & Velkoff, 2001) and as an increasing number of adults enter later adulthood without partners and children (Schoen, Urton, Woodrow, & Baj, 1985).

Applying a resilience model: Volunteering as a protective factor in the face of risk.—To model and test relationships between older adults' major role-identity absences, volunteer activities, and psychological well-being, this study employed a resilience framework. Although scholars have long disputed definitions of resilience (for more detailed reviews, see Luthar, Cicchetti, & Becker, 2000; Rutter, 1990), we conceptualize resilience as a multidimensional process, which entails both adversity that places individuals at heightened risk for experiencing negative outcomes and protective factors that buffer individuals against these negative consequences of adversity (Rutter, 1990). We treat multiple types of major role-identity absence as a risk factor for decreased well-being. Taking into account Moen and colleagues' (1992) discussion of role context, which focuses on how the effect of one role on well-being might be influenced by a combination of other roles, we hypothesize that being a formal volunteer might serve as a protective mechanism moderating the risk of having major role-identity absences on three dimensions of psychological well-being.

Psychological well-being: A multidimensional construct.— Within the gerontologic literature on volunteering and psychological well-being, well-being has been investigated most commonly in terms of life satisfaction (Van Willigen, 2000). Although gerontologists often characterize volunteer activities as opportunities for meaning, role enactment, and productivity (Herzog & House, 1991; Jirovec & Hyduk, 1998), few researchers have measured well-being in these or related terms. To address substantive limitations of previous research, this study focuses on three dimensions of well-being relating to two different approaches to conceptualizing well-being (Ryan & Deci, 2001). We include measures of positive and negative affect to investigate how volunteering is associated with hedonic conceptions of well-being, which typically approach well-being as the maximization of life satisfaction and positive affect and the minimization of negative affect (Kahneman, Diener, & Schwarz, 1999). We also include a measure of purpose in life: an indicator that is consistent with eudaimonic approaches that conceptualize well-being as an individual's fruitful engagement with life, meaning finding, and experiences of optimal growth (Keyes, Shmotkin, & Ryff, 2002).

Hypotheses.—Guided by interactional role theory and a resilience framework as well as the current empirical literature, we developed a conceptual model (Figure 1), suggesting that volunteering would moderate the risk of an increased number of major role-identity absences on psychological well-being among older adults. We then tested the following hypotheses:

Hypothesis 1. Older adults who have more role-identity absences in major life domains (partner, employment, and parental) will report poorer psychological well-being compared with older adults who report fewer major role-identity absences.

Hypothesis 2. Older adults who are volunteers will report better psychological well-being in contrast to older adults who are not volunteers.

Hypothesis 3. Older adults with a greater number of major roleidentity absences who are volunteers will experience better psychological well-being in contrast to older adults with more major role-identity absences who are not volunteers.

Метнор

Data

This study used data from a subsample of National Survey of Midlife Development in the U.S. (MIDUS) respondents. The MIDUS national probability sample that answered both telephone and self-administered surveys includes 3,032 English-speaking, noninstitutionalized adults who were between the ages of 25 and 74 when interviewed in 1995. The analytic sample for this study consisted of 373 adults between the ages of 65 and 74, inclusive.

The MIDUS sample was obtained through random digit dialing, with an oversampling of older middle-aged respondents and men made to ensure a good distribution on the cross-classification of age and gender. Sampling weights correcting for selection probabilities and nonresponse allow this sample to match the composition of the U.S. population on age, sex, race, and education. For this study, multivariate regression models were estimated with both the unweighted and the weighted data. No major differences in results were found. Therefore, results from unweighted analyses are reported, as these analyses provide estimates that are most efficient; that is, they provide parameters with minimized standard errors (Winship & Radbill, 1994).

Respondents first participated in a telephone interview lasting approximately 40 min. The response rate for the telephone questionnaire was 70%. Respondents to the telephone survey were then asked to complete two self-administered mail-back questionnaires. The response rate for the questionnaire was 86.8% of telephone respondents. Therefore, the overall response rate for the sample that answered both the telephone survey and the questionnaire was 60.8%. Non-respondents to the MIDUS tended to have lower levels of education and income and to be from nonmajority racial—ethnic groups. Sampling weights correct for this bias in weighted analyses, and we control for these factors in unweighted as well as weighted analyses. (For a detailed technical report regarding field procedures, response rates, and weighting, see http://midmac.med.harvard.edu/research.html#tchrpt.)

Measures

Negative and positive affect.—Two six-item scales were used to measure positive and negative affect (Mroczek & Kolarz, 1998). To assess negative affect, participants were asked how frequently in the last 30 days they felt (a) so sad nothing could cheer them up, (b) nervous, (c) restless or fidgety, (d) hopeless, (e) that everything was an effort, and (f) worthless. Similarly, to assess positive affect, participants were asked how frequently they felt (a) cheerful, (b) in good spirits, (c) extremely happy, (d) calm and peaceful, (e) satisfied, and (f) full of life. Respondents answered each of the 12 affect items

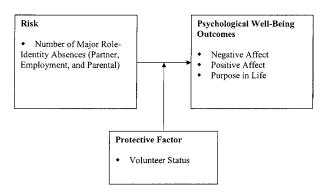


Figure 1. Conceptual model for the risk-buffering effect of volunteering for older adults' psychological well-being.

by using a 5-point scale (1 = all of the time, 5 = none of the time). Items were reverse coded and summed so that higher scores indicated more negative and more positive affect. Cronbach's alpha was .83 and .88 for the negative affect and positive affect indexes, respectively.

Purpose in life.—To assess purpose in life, the questionnaire included a three-item version of Ryff's Purpose in Life Index (Ryff, 1989; Ryff & Keyes, 1995). For large survey use, Ryff created this three-item index as an additive measure designed to represent the conceptual breadth of "purpose in life," which she found in factor analyzing her 20-item scale. One subfactor, future orientation, is indicated with the item, "I live life one day at a time and don't really think about the future." A second subfactor, related to having a sense of aims and direction, is indicated with the item, "Some people wander aimlessly through life, but I am not one of them." A third subfactor, related to having new goals, is indicated with the item, "I sometimes feel as if I've done all there is to do in life." For all three items, respondents were asked to "indicate how strongly you agree or disagree" with the statements on a 6-point continuum (1 = strongly agree, 6 = strongly disagree). Items were reverse coded and summed so that higher scores indicated more purpose in life. This additive index is correlated highly (r > .70) with its parent 20-item, highly reliable scale (Ryff & Keyes, 1995).

Major role-identity absences score.—Participants received a summative score of major role-identity absences by adding together their number of absent roles in major life domains: partner (not married), employment (not employed full- or parttime), and parental (no living biological, adopted, or stepchild, nor any living child who a respondent had helped to raise for 5 years or more). Higher scores indicated participants who experienced a greater number of major role-identity absences.

Volunteer status.—A four-part item in the questionnaire asked participants, "On average, about how many hours per month do you spend doing formal volunteer work of any of the following types: (a) hospital, nursing home, or other healthcare-oriented volunteer work; (b) school or other youth-related volunteer work; (c) volunteer work for political organizations or causes; (d) volunteer work for any other organization, cause, or charity?" Respondents who reported volunteering in any quantity per month for any combination of volunteer

Table 1. Weighted Percentage Distribution for Major Role-Identity Variables

Variable	Percen
Type of role-identity absence	
Employment	78.3
Parental	8.1
Partner	32.6
Number of role-identity absences	
None	12.3
One	61.1
Two	22.7
Three	4.0

 $\it Source$: National Survey of Midlife Development in the U.S. (MIDUS) 1995, respondents aged 65–74.

organizations were coded "1." Respondents who reported no volunteering were coded "0."

Control Variables

Previous work has demonstrated that psychological wellbeing is associated with age, race, gender, education, income, and health (Mroczek & Kolarz, 1998; Ryff, 1995). In addition to being related to the dependent variable, these sociodemographic variables are also related to the independent variables of interest: major role-identity absences (Tucker & Mitchel-Kernan, 1995) and volunteering (Duke, Leventhal, Brownlee, & Leventhal, 2002; Meadows, 1996). To provide evidence that major role-identity absences and their interaction with being a volunteer contribute to psychological well-being independent of other factors, age, race, gender, income, education, and functional health limitations were controlled in all analyses. Respondents' age was assessed as years since birth at the time of the telephone survey. Participants who identified themselves as African American were coded "1" on a dichotomous variable for race. Likewise, participants who identified themselves as female were coded "1" on a dichotomous variable for gender. Participants' income was computed by combining their personal annual income with that of their spouse. Education was coded on a 4-point scale, with "1" indicating that the participant had completed some or no years of high school, "2" indicating that the participant had completed high school, "3" indicating that the participant had some years of higher education, and "4" indicating that the participant had obtained a 4-year college degree or more education. Functional health limitations were assessed with six items asking respondents to indicate the degree to which their health limits them in carrying groceries, climbing several flights of stairs, bending, kneeling, or stooping, walking several blocks, engaging in vigorous activity (e.g., running, lifting heavy objects), and engaging in moderate activity (e.g., bowling, vacuuming; 1 = "a lot," 4 = "not at all"). Scores were reverse coded, and the mean level of response was computed; higher scores indicated more functional health limitations.

Data Analytic Sequence

Multivariate regression models were estimated to test the hypothesized associations among psychological well-being outcomes, major role-identity absences, and volunteer status. Preliminary analyses examined evidence for gender differences in the effects of major role-identity absences as well as for

Table 2. Descriptives for Analytic Variables

Variable	Mean (SD)	Range		
Number of role-identity absences	1.18 (.69)	0–3		
Volunteer status ^a	.36 (.48)	0-1		
Negative affect	8.77 (3.28)	6-27		
Positive affect	21.43 (3.87)	9-27		
Purpose in life	10.04 (3.15)	2-15		
Age	69.65 (2.95)	60-74		
Income	37,691 (39,337)	0-3,000,000		
Education	2.55 (1.02)	1–4		
Race $(1 = Black)^a$.07 (.26)	0-1		
Gender $(1 = woman)^a$.57 (.50)	0-1		
Functional health limits	2.14 (.89)	1–4		

Note: Descriptives computed with weighted data.

Source: National Survey of Midlife Development in the U.S. (MIDUS) 1995, respondents aged 65–74.

gender differences in the effects of volunteering, on each of the three outcomes. None of the gender interactions in these models reached statistical significance ($p \leq .05$); therefore, it was deemed appropriate to analyze data from women and men together.

For final analyses, in the first model, the six control variables were entered. In the second model, the main independent variables (major role-identity absences and volunteer status) were added to evaluate Hypotheses 1 and 2. In the third model, the interaction term (major role-identity absences × volunteer status) was added to evaluate Hypothesis 3 and to further evaluate Hypotheses 1 and 2. All three models were estimated across each of the three dimensions of psychological well-being.

RESULTS

Descriptive Findings

Table 1 presents descriptive information regarding the prevalence of major role-identity absences. More than three fifths (61.1%) of the respondents reported having only one major role-identity absence, and very few (4.0%) reported having all three. Having a parental role-identity absence was the least common form of major role-identity absence; 8.1% of the sample reporting having no living children. About one third of the respondents (32.6%) experienced a partner role-identity absence, and 78.3% lacked an employment role-identity. Table 2 provides descriptives for all analytic variables. Thirty-six percent of participants reported volunteering for a formal organization at least once per month.

Major Role-Identity Absences and Psychological Well-Being

To examine initial evidence for our first hypothesis regarding the linkages between major role-identity absences and psychological well-being, we estimated a model regressing each psychological well-being outcome on participants' number of major role-identity absences and volunteer status (Table 3, Model 2). Major role-identity absences consistently predicted participants' poorer psychological well-being, which provided strong initial support for Hypothesis 1. More major role-identity absences were associated with more negative affect

^aDichotomous variables are reported as proportions.

Variable	Negative Affect			Positive Affect			Purpose in Life		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Age	12*	13**	13**	.03	.04	.04	04	03	02
Income	00	00	00	.00**	.00*	.00*	$.00^{+}$.00	.00
Education	36*	30^{+}	30^{+}	29	40*	40*	.64***	.57***	.60***
Race $(1 = Black)$	94	99	99	.97	1.15	1.16	45	40	25
Gender $(1 = woman)$.49	.36	.36	25	18	17	28	21	14
Functional limits	1.01***	.70***	.96***	89***	84***	84***	51**	43*	40*
Role-identity absences		.70**	.69*		65*	68^{+}		50*	91**
Volunteer status		43	44		.88*	.80		.39	83
Role-identity absences ×									
Volunteer status			.01			.07			1.05*
Constant	15.98***	15.94***	15.94**	21.18***	21.14***	21.15***	12.00***	12.09***	11.90***
R^2	.14	.17	.17	.07	.10	.10	.13	.13	.15
Valid N	368	364	364	368	364	364	351	347	347

Table 3. Estimated Unstandardized Regression Coefficients for Effects of Major Role-Identity Absences and Volunteering on Psychological Well-Being

Note: Analyses used unweighted data.

Source: National Survey of Midlife Development in the U.S. (MIDUS) 1995, respondents aged 65-74.

 $(b=.70, p \le .01)$, less positive affect $(b=-.65, p \le .05)$, and less purpose in life $(b=-.50, p \le .05)$.

Volunteering and Psychological Well-Being

To examine initial evidence for our second hypothesis regarding linkages between volunteering and psychological well-being, we again focus on Table 3 (Model 2). Results demonstrated that being a volunteer was a predictor of more positive affect (b = .88, $p \leq .05$). Volunteer status failed to help predict respondents' levels of negative affect and purpose in life.

Volunteering as a Protective Factor

To examine evidence for our third hypothesis regarding how volunteering might moderate the effect of major role-identity absences on psychological well-being, we estimated Model 3, which added the major role-identity absences \times volunteer status interaction variable. Results demonstrated a significant interaction effect for respondents' purpose in life (b=1.05, $p\leq.05$), but not for their positive or negative affect. These findings suggest that the effect of major role-identity absences on respondents' feelings of purpose in life is contingent upon whether or not they volunteer.

To better interpret this interaction, we calculated predicted scores for purpose in life for volunteers and nonvolunteers across the two end-points of the continuum for major role-identity absences (i.e., no major role-identity absences and all three major role-identity absences). As Figure 2 demonstrates, for nonvolunteers, an increase from zero to three major role-identity absences lowered respondents' predicted purpose in life by about 1 SD. However, for volunteers, a greater number of role-identity absences was not associated with a substantial change in levels of purpose in life. These patterns suggest that volunteering beneficially moderates the relationship between respondents' major role-identity absences and feelings of purpose in life, providing support for Hypothesis 3.

DISCUSSION

The findings of this study contribute to our understanding of linkages among role identities in major life domains, formal volunteering, and multiple dimensions of psychological well-being in later life. First, consistent with previous studies on roles and well-being in later adulthood (Coleman et al., 1987; Hong & Seltzer, 1995), findings indicate that having major role-identity absences constitutes a strong risk factor for older adults' poorer psychological well-being. When compared with respondents with fewer major role-identity absences, older adults with more role-identity absences in major life domains reported lower levels of psychological well-being across all three dimensions examined in this study.

Second, results from this study contribute to recent gerontologic interest in the need to investigate differential advantages of volunteering, depending on the diverse contexts of older adults' volunteer activities (Morrow-Howell et al., 2003; Musick et al., 1999; Van Willigen, 2003). This study highlights one way in which role context might influence the relationship between volunteering and well-being. Specifically, results suggest that volunteering serves as a protective factor against the psychological well-being disadvantage of reduced sense of purpose in life that accompanies a greater number of major role-identity absences. Consistent with interactional role theory, which posits that social roles contribute to one's self through the creation of

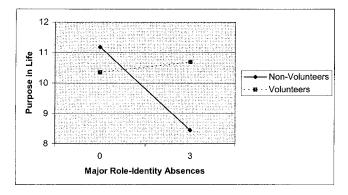


Figure 2. Predicted scores of purpose in life across two different categories of risk for volunteers and nonvolunteers.

 $^{^{+}}p < .10; *p < .05; **p < .01; ***p < .001 (two tailed).$

role-identities (Stryker & Statham 1985), the results suggest that formal volunteering provides a role-identity from which older adults can derive psychological advantages. The likelihood that major role-identities are associated with increased social contact also makes our results congruent with the findings of Musick and colleagues (1999) that volunteering has a greater protective effect on mortality for socially isolated older adults than for those who are socially integrated.

It is noteworthy that the resilience model was not consistently supported across all three dimensions of psychological well-being examined. Results suggest that volunteering might not protect participants from the increased negative affect and the decreased positive affect that accompanies a greater number of major role-identity absences in young old age, but volunteering provides a mechanism through which older adults with more role-identity absences in major life domains can maintain goals, aims, and direction (i.e., purpose in life). We contend that the inconsistency in these results is substantively coherent. Because eudaimonic approaches to well-beingwhich include purpose in life—address participants' active engagement with life and because marriage, work, children, and volunteering are primary channels through which people gain a sense of engagement, it is plausible that the proposed resilience model was confirmed for purpose in life, but not for positive or negative affect. Similarly, we interpret the pattern of main, independent effects on hedonic dimensions of well-being (i.e., negative and positive affect) as substantively coherent. A strong U.S. ideology of volunteering as a "feel good" activity for people of all ages might explain why volunteering is associated with positive affect, but not negative affect. Volunteering might not prevent us from feeling dysphoric, but it might help us to feel cheerful and happy in later adulthood.

Overall, results from this study are congruent with gerontologic theorizing about social roles and might further illuminate why volunteering has been found to have greater psychological significance in the lives of older adults than younger adults (Van Willigen, 2000). Evidence for the buffering effect of volunteering on purpose in life supports theories that posit that social role identities are an important source of meaning for adults (Thoits, 1983). Accordingly, volunteering might provide older adults, who are likely lacking other major sources of role-identity, an opportunity for developing more meaning and experiencing more purpose in their lives. Younger adults might not derive as strong a well-being advantage from volunteering because they typically do not experience as many major role-identity absences as older adults do.

In addition to helping to identify role contexts in which volunteering holds greatest well-being advantages for participants, this study also demonstrates the importance of specifying and examining exactly which dimensions of psychological well-being are most likely to be influenced by volunteering. Patterned differences in results from this study suggest that, depending upon the conceptualization and dimensional measure of psychological well-being used, analyses might or might not detect linkages between volunteering and well-being. Perhaps this fact can account for some of the inconsistencies in previous findings regarding older adults' volunteer activities and well-being (see Jirovec & Hyduk, 1998, for a review). Findings from this study further support the idea that psychological well-being is a multidimensional construct (Keyes et al., 2002) and underline

the importance of continuing to do research grounded in varied conceptualizations of psychological well-being.

It is important to note that the conclusions drawn from this study must be considered with caution. Owing to its crosssectional methodologic design, the direction of causality between volunteering and psychological well-being cannot be established with certainty. For example, having more positive affect might lead some older adults to engage in volunteering, rather than their greater positive affect being a result of volunteer activities. Studies employing longitudinal designs are needed to investigate more conclusively the causal associations between major role-identity absences, volunteering, and psychological well-being. Also, this study does not investigate whether informal volunteering (e.g., helping a neighbor) serves as a protective factor for older adults' well-being, nor does it specify the possibly varied advantages of different forms and levels of formal volunteering. Additionally, the study's sample was limited to young-old adults, aged 65-74. Patterns and processes might differ for adults age 75 and older.

Nonetheless, the results of this study contribute additional empirical support for the psychological benefits of increasing opportunities for older adults' volunteer activities. Findings suggest, however, that volunteering is not a universal panacea influencing all dimensions of psychological well-being, nor is it associated with the same degree of psychological benefit for all older adults. Further research is needed to address the limitations of this study, to identify other factors that might serve as protective mechanisms for older adults' psychological wellbeing when major role-identity absences put them at risk, as well as to develop a more precise understanding of when volunteering is most strongly associated with enhanced psychological wellbeing. Continuing to investigate these processes will provide researchers and practitioners with a more comprehensive and useful understanding of how optimal mental health might be achieved and maintained through the entirety of adulthood.

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REFERENCES

Adelmann, P. K. (1994a). Multiple roles and physical health among older adults. Research on Aging, 16, 142–154.

Adelmann, P. K. (1994b). Multiple roles and psychological well-being in a national sample of older adults. *Journal of Gerontology: Social Sciences*, 49, S277–S285.

Bronfenbrenner, U. (1979). Roles as contexts of human development. In *The ecology of human development: Experiments by nature and design* (pp. 83–105). Cambridge, MA: Harvard University Press.

Burke, P. J., & Tully, J. C. (1977). The measurement of role-identity. *Social Forces*, 55, 881–897.

Chambre, S. M. (1993). Volunteerism by elders: Past trends and future prospects. *The Gerontologist*, 33, 221–228.

Coleman, L. M., Antonucci, T. C., & Adelmann, P. K. (1987). Role involvement, gender, and well-being. In F. J. Crosby (Ed.), Spouse, parent, worker: On gender and multiple roles (pp. 138–153). New Haven: Yale University Press.

- Duke, J., Leventhal, H., Brownlee, S., & Leventhal, E. A. (2002). Giving up and replacing activities in response to illness. Journal of Gerontology: Social Sciences, 57B, S367-S376.
- Durkheim, E. (1979). Suicide. In J. E. Jacoby (Ed.), Classics of criminology (pp. 124-129). Prospect Heights, IL: Waveland Press.
- Goode, W. J. (1960). A theory of role strain. American Sociological Review, 25, 483-496.
- Gove, W. R., Style, C. B., & Hughes, M. (1991). The effect of marriage on the well-being of adults: A theoretical analysis. Journal of Family Issues, 11, 4-35.
- Herzog, A. R., & House, J. S. (1991). Productive activities and aging well. Generations, 15, 49-54.
- Hong, J., & Seltzer, M. M. (1995). The psychological consequences of multiple roles: The nonnormative case. Journal of Health and Social Behavior, 36, 386-398.
- Jirovec, R. L., & Hyduk, C. A. (1998). Type of volunteer experience and health among older adult volunteers. Journal of Gerontological Social Work, 30, 29-42.
- Kahneman, D., Diener, E., & Schwarz, N. (1999). Well-being: The foundations of hedonic psychology. New York: Russell Sage Foundation.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing wellbeing: The empirical encounter of two traditions. Journal of Personality and Social Psychology, 82, 1007-1022.
- Kim, J. E., & Moen, P. (2002). Retirement transitions, gender, and psychological well-being: A life-course, ecological model. Journal of Gerontology: Social Sciences, 57B, S212-S222.
- Kinsella, K., & Velkoff, V. A. (2001). An aging world: 2001. Washington, DC: U.S. Government Printing Office.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. Child Development, 71, 543-562.
- Marks, N. F., Bumpass, L. L., & Jun, H. J. (2004). Family roles and wellbeing during the middle life course. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), How healthy are we? A national study of well-being at midlife (pp. 514-549). Chicago: University of Chicago Press.
- Meadows, L. M. (1996). Discovering women's work: A study of postretirement aged women. Marriage and Family Review, 24, 165-191.
- Miller, M. L., Moen, P., & Dempster-McClain, D. (1991). Motherhood, multiple roles, and maternal well-being: Women of the 1950s. Gender and Society, 5, 565-582.
- Moen, P. (1996). A life course perspective on retirement, gender, and wellbeing. Journal of Occupational Health Psychology, 1, 131-144.
- Moen, P., Dempster-McClain, D., & Williams, R. M., Jr. (1992). Successful aging: A life course perspective on women's multiple roles and health. American Journal of Sociology, 97, 1612-1647.
- Morrow-Howell, N., Hinterlong, J., Rozario, P. A., & Tang, F. (2003). Effects of volunteering on the well-being of older adults. Journal of Gerontology: Social Sciences, 58B, S137-S145.
- Mroczek, D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: A developmental perspective on happiness. Journal of Personality and Social Psychology, 75, 1333–1349.
- Musick, M. A., Herzog, A. R., & House, J. S. (1999). Volunteering and mortality among older adults: Findings from a national sample. Journal of Gerontology: Social Sciences, 54B, S173-S180.
- Pietromonaco, P. R., Manis, J., & Frohardt-Lane, K. (1986). Psychological consequences of multiple social roles. Psychology of Women Quarterly, 10, 373-382.
- Prigerson, H. G., Frank, E., Kasl, S. V., Reynolds, C. F. I., Anderson, B., Zubenko, G. S., et al. (1995). Complicated grief and bereavement-related depression as distinct disorders: Preliminary empirical validation in elderly bereaved spouses. American Journal of Psychiatry, 152, 22-30.

- Rouse, S. B., & Clawson, B. (1992) Motives and incentives of older adult volunteers. Journal of Extension, 30. On-line access at http://www. joe.org/joe/1992fall/a1.html.
- Rushing, B., Ritter, C., & Burton, R. P. D. (1992). Race differences in the effects of multiple roles on health: Longitudinal evidence from a national sample of older men. Journal of Health and Social Behavior, 33, 126-139.
- Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, & D. Cicchetti (Eds.), Risk and protective factors in the development of psychopathology (pp. 181-214). New York: Cambridge University Press.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudemonic well-being. Annual Review of Psychology, 52, 141-166.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57, 1069-1081.
- Ryff, C. D. (1995). Psychological well-being in adult life. Current *Directions in Psychological Sciences*, 4, 99–104.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology, 69,
- Schoen, R., Urton, W., Woodrow, K., & Baj, J. (1985). Marriage and divorce in twentieth century American cohorts. Demography, 22, 101-114
- Shmotkin, D., Blumstein, T., & Modan, B. (2003). Beyond keeping active: Concomitants of being a volunteer in old-old age. Psychology and Aging, 18, 602-607.
- Sieber, S. D. (1974). Toward a theory of role accumulation. American Sociological Review, 39, 567-578.
- Stroebe, M., Stroebe, W., & Schut, H. (2001). Gender differences in adjustment to bereavement: An empirical and theoretical review. Review of General Psychology, 5, 62-83.
- Stryker, S., & Statham, A. (1985). Symbolic interaction and role theory. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology: Vol. II. Theory and method (3rd ed., pp. 311-378). New York: Random
- Thoits, P. A. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. American Sociological Review, 48, 174-187.
- Thoits, P. A. (1986). Multiple identities: Examining gender and marital status differences in distress. American Sociological Review, 51, 259-
- Tucker, B. M., & Mitchel-Kernan, C. (1995). The decline in marriage among African Americans: Causes, consequences, and policy implications. New York: Russell Sage Foundation.
- Turner, R. H. (1978). The role and the person. American Journal of Psychiatry, 84, 1-23.
- Umberson, D., & Gove, W. (1989) Parenthood and psychological wellbeing: Theory, measurement, and stage in the family life course. Journal of Family Issues, 10, 440-462.
- Van Willigen, M. (2000). Differential benefits of volunteering across the life course. Journal of Gerontology: Social Sciences, 55B, S308–S318.
- Verbrugge, L. M. (1983). Multiple roles and physical health of women and men. Journal of Health and Social Behavior, 24, 16-30.
- Winship, C., & Radbill, L. (1994). Sampling weights and regressionanalysis. Sociological Methods and Research, 23, 230-257.

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