



# Research Reports

# The Effect of the Psychological Sense of Community on the Psychological Well-Being in Older Volunteers

Maura Pozzi\*a, Elena Martaa, Daniela Marzana, Caterina Gozzoli, Ruggero Andrisano Ruggieri

[a] Department of Psychology, Università Cattolica del Sacro Cuore, Milano, Italy. [b] Department of Psychology, Università Cattolica del Sacro Cuore, Brescia, Italy. [c] Department of Human, Philosophical and Educational Science, University of Salerno, Fisciano, Italy.

# **Abstract**

Ageing populations across Europe are increasing. Communities have an important role in not only engaging this segment of the population but also in helping them to make them feel "part of something" (local or global) in order to favour their psychological well-being. The purpose of this paper is to study the effects of volunteering and being connected in one's community on well-being. The present paper will test an older volunteers' psychological well-being model. 143 older volunteers completed measures of religiousness, sense of global responsibility, psychological sense of community, generativity, motivation to volunteer and a profile of mood states. Data show that a psychological sense of community has a key role in the study of older volunteerism due to its impact on well-being. Service agencies and administrations can develop campaigns to sustain older volunteerism in order to increase well-being and reduce social costs.

Keywords: older volunteers, motivation to volunteer, psychological sense of community, psychological well-being, volunteerism

Europe's Journal of Psychology, 2014, Vol. 10(4), 598-612, doi:10.5964/ejop.v10i4.773

Received: 2014-03-07. Accepted: 2014-06-04. Published (VoR): 2014-11-28.

Handling Editor: Izabela Lebuda, Academy of Special Education, Warsaw, Poland

\*Corresponding author at: Department of Psychology, Università Cattolica del Sacro Cuore, L.go Gemelli, 1, 20123 Milano, Italy. E-mail: maura.pozzi@unicatt.it



This is an open access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

# Introduction

There is a longstanding and growing tradition in psychology and sociology of studying particular kinds of community involvement, such as volunteerism, as well as the variables related to its occurrence and the effects that reveal its benefits, both at an individual (Burr, Tavares, & Mutchler, 2011; Fothergill et al., 2011; Okun, August, Rook, & Newsom, 2010) and societal level (Cutler, Hendricks, & O'Neill, 2011; Principi, Chiatti, & Lamura, 2012).

Volunteerism is a specific type of sustained, planned, pro-social behaviour that benefits strangers and occurs within an organizational setting (Omoto & Snyder, 1995; Penner, 2002; Snyder & Omoto, 2000). Volunteers are generally defined as

people [who] often actively seek out opportunities to help others; [who] may deliberate for considerable amounts of time about whether to volunteer, the extent of their involvement and the degree to which particular activities fit with their own personal needs; and [who] may make a commitment to an ongoing

helping relationship that may extend over a considerable period of time and that may entail considerable personal costs of time, energy, and opportunity (Clary et al., 1998, p. 1517).

Most research attempts to study volunteerism as a phenomenon similar at all ages (Mannino, Snyder, & Omoto, 2011; Omoto & Snyder, 1995; Penner, 2002). In the tradition of volunteerism studies, scholars tried to find a common model explaining this particular kind of civic commitment throughout all the stages of a person's life course (Clary et al., 1998; Omoto & Snyder, 1995). More recently, a number of studies have been interested in distinguishing the influence of being active in one's community of belonging at different points of life (Marta & Pozzi, 2007; Omoto, Snyder, & Martino, 2000). At an individual level, volunteerism has positive effects amongst all age groups: In particular, it has positive effects on older well-being.

This is tremendously important when considering that the Commission of the European Communities Research Directorate-General highlights that ageing populations across Europe are increasing. In Western Europe, the proportion of older people over the age of 60 will rise from 21 per cent in 2008 to 33 per cent in 2035. The increase will be similar in Eastern Europe: From 19 per cent in 2008 to 32 per cent in 2035 (Kapella, de Liedekerke, & de Bergeyck, 2011).

As Antonucci, Okorodudu, and Akiyama (2002) point out, "old age represents a new frontier" (p. 617). The rising numbers of older people, resulting from reduced mortality and the decrease in the number of children being born, obliges the scientific community to focus on this particular stage of the life course.

Recently, Adams and Rau (2011) concluded that it is important to address retirement preparation. Many scholars suggest volunteerism as a useful instrument in this preparation (Morrow-Howell, Hinterlong, Rozario, & Tang, 2003; Morrow-Howell, Hong, & Tang, 2009; Omoto, Snyder, & Martino, 2000; Piliavin, 2005; Snyder & Omoto, 2008; Van Willigen, 2000).

Both psychologists (Hinterlong, Morrow-Howell, & Rozario, 2007) and sociologists (Siegrist, von dem Knesebeck, & Pollack, 2004) agree in saying that being socially productive, i.e., engaging in social activities such as volunteering, has positive results on better health and psychological well-being in older populations. Productive engagement in terms of productive roles, such as unpaid volunteer, caregiver, or provider of informal social assistance, is positively associated with health.

Furthermore, activity theorists suggest that older people in particular engage in their community due to a new social responsibility derived from the fact that many roles central to identity, such as working roles, are lost or heavily decreased as we age (Lemon, Bengtson, & Peterson, 1972; Longino & Kart, 1982; Steinkamp & Kelly, 1987).

Research on older volunteers has found that being active in one's own community is positively associated with self-esteem (Omoto et al., 2000; Van Willigen, 2000), life satisfaction (Bond, 1982; Fengler, 1984; Harlow & Cantor, 1996), a sense of purpose (Weinstein, Xie, & Cleanthous, 1995), extended social support systems (Moen, Dempster-McClain, & Williams, 1992), and longevity (Musick et al., 1999; Oman et al., 1999). In addition, Musick and Wilson (2003) suggested that increased social connections associated with volunteer activities may contribute to mental health benefits.

In accordance with Mellor and colleagues (Mellor et al., 2009), we note that most of the literature on older volunteers focuses on physical activity benefit and indicates that volunteering helps people stay healthy and live longer when



studying variables of morbidity and mortality in large samples of older volunteers of the community (Musick, Herzog, & House, 1999; Oman, Thoresen, & McMahon, 1999; Lum & Lightfoot, 2005). We think it is important, as Mellor and colleagues (2009) argue, that "these findings are subject to possible moderating and mediating effects, since certain groups may benefit more from volunteering" (p. 145). In fact, volunteerism has recently often been cited as one instrument useful in promoting psychological well-being (Greenfield & Marks, 2004; Mellor et al., 2009; Morrow-Howell et al., 2003; Musick & Wilson, 2008).

Meta-analyses reveal that those old people engaged in direct helping seemed to derive greater rewards from volunteering than other old people engaged in more indirect or less formally "helping" roles (Principi, Chiatti, Lamura, & Frerichs, 2012; Wheeler, Gorey, & Greenblatt, 1998) in terms of life satisfaction and other health indices and lower mortality (Oman et al., 1999).

Volunteers significantly reduce mortality compared to non-volunteers, and this association is greater for those who frequently attended religious services (Harris & Thoresen, 2005). Other studies have found that volunteering is associated with greater social integration and more social connections. Additionally, in a circular way, studies suggest that being linked to one's community increases the likelihood of volunteering (Narushima, 2005). Okun and Michel (2006) highlight the role of community in the context and process of volunteering, demonstrating the importance of the psychological sense of community in volunteering as an antecedent to voluntary service. Authors have also stated that

individuals with a strong sense of community are posited to feel obligated to work on behalf of the community [...] and because of the efficacy and resources associated with a strong sense of community, such individuals are postulated to work hard to improve their communities (p. 174).

Hence, a sense of community makes people feel connected to their community and work for it in a voluntary way.

Volunteering during old age may benefit the volunteers themselves as well as the organizations and individuals they serve (Mannino, Snyder, & Omoto, 2011). Several mechanisms have been hypothesized linking volunteering to improved well-being, health and longevity (Burr et al., 2011; Fothergill et al., 2011; Harlow & Cantor, 1996; Okun et al., 2010). In general, volunteering provides increased opportunities for social contacts and facilitates access to salutary social resources, such as emotional, cognitive, or material support as well as health-related information (Luoh & Herzog, 2002).

### Theoretical Frame: Volunteerism and Well-Being

Okun and Michel (2006) also highlight the importance of some variables intervening in the link between older volunteerism and well-being. One of these is church attendance and *religiousness*. Volunteerism has a protective effect among those older volunteers who have a close intimate relationship or who frequently attend religious services. This can also facilitate developmentally mature goals, such as sustained engagement with life or desire to become or remain generative (Harris & Thoresen, 2005). Religious service attendance acts as a scaffold upon which the volunteering experience is more developmentally significant and beneficial, with it developing religiousness (Markides, 1983). "Religiousness may protect against disease indirectly by association with healthy lifestyles" (Fetzer Institute, 2003, p. 3).

Starting from a conceptualization of volunteering explained through a theory of social capital, religious affiliation is a variable that needs to be studied to understand volunteering. Mellor and colleagues (2009) refer that some



studies on volunteering during old age highlight that "attending religious services regularly may link volunteering to reduced morbidity and mortality" (p. 145).

Participating in religious services is an opportunity to be involved with one's own community of belonging and can be related to one's own motivation to feel connected to it and start voluntary actions (Okun, O'Rourke, Keller, Johnson, & Enders, 2014). Moreover, participating in religious services can favour the experience of both intragenerational and inter-generational relationships, especially with children and adolescents of the community. More recently, Einolf (2011) demonstrated that religious values and beliefs promote helping others. Religious people often show a higher level of generativity (McAdams, 2006).

Okun and Michel (2006) emphasise that the generative concern is an important variable in volunteering: In fact, in our opinion, an important intervening variable between volunteerism and well-being is *generativity*.

Generativity, according to Snyder and Clary (2004), has an important role in defining incentives to volunteer and it is considered an additional "motivation" to volunteer. Generativity is the "concern in establishing and guiding the next generation" (Erikson, 1963, p. 267). Generativity is closely connected to identity and civic responsibility considered as a particular element of a greater community involvement (Marta, Pozzi, & Marzana, 2010). Generativity concerns the desire to *connect* and *commit* to the broader society. In addition, Snyder and Clary (2004) highlight the connections between volunteerism and generativity. According to the authors, both demonstrate an interest for someone outside one's own circle of acquaintances. "In both activities we find human beings attempting to connect with others, both others who exist and others who will one day exist, and in doing so, contribute to their communities and to their society" (p. 235). For this last reason, generativity can be related to the psychological sense of community.

Generativity could be consider a specific kind of *motivation*, which is an important variable in the volunteer recruiting process and in the intention to continue volunteering (Marta & Pozzi, 2008; Omoto & Snyder, 1995). Omoto and Snyder (1995) argue that motivations to volunteer may change during the volunteer activity and that they are different along the different phases of the life cycle. Moreover, following Omoto, Snyder, and Martino (2000), older volunteers are motivated by a strong sense of belonging to their community and a feeling of obligation to give back to it what they have received over the course of their life. In our opinion, and for the latter reason, another important variable is *sense of global responsibility* (Malsch, 2005). A sense of global responsibility is the feeling of being globally responsible for others. As Malsch noted, feeling responsible for others increases the relationship between people and the community they live in; thus, volunteers express their global responsibility by being involved in the community they live in. Global responsibility is always associated with the *psychological sense of community* (PSoC).

PSoC in the traditional definition by Sarason (1986) is the sense that one belongs to and is meaningfully part of a larger collectivity, and includes "perceptions of similarity to others, acknowledged interdependency with others, willingness to maintain interdependence by giving to, or doing for, what one expect from them, and feeling that one is part of a larger dependable and stable structure" (Sarason, 1974, p. 157).

PSoC has been shown to relate positively to psychological well-being as well as some indicators of social capital, such as church attendance (Brodsky, O'Campo, & Aronson, 1999). Following Omoto and Malsch (2005), we will consider PSoC as a state involving communities that are not only contexts (associations) but also processes (volunteer activity). PSoC, as theorized by Okun and Michel (2006), affecting the motivation to volunteer.



The results for PSoC have revealed it to be a unique and independent predictor of later activism and civic participation. In Omoto and Snyder's studies (2000), AIDS-related volunteers who reported getting involved to enhance community connections as well as support and meet current community needs (and who also met more people personally affected by HIV disease) were found to be engaged in more AIDS-related activities 6 months later. This means that encouraging connections to one's community by improving PSoC can lead people to be involved in activities supporting that community for longer periods of time. People can be motivated to be more connected.

# The Present Study

Current literature clearly shows that all the above mentioned variables are directly or indirectly related to each other. Up to now, no clear model has been provided to understand how all these variables are connected and how they, and especially PSoC, affect psychological well-being in a sample of older volunteers. The present research aims to fill this gap.

In accordance with the aforementioned literature, we hypothesize that PSoC has a mediator role between religiosity and global responsibility, on one hand, and motivational variables (motivation to volunteer and generativity), on the other; and that all of these have an impact on psychological well-being (see Figure 1).

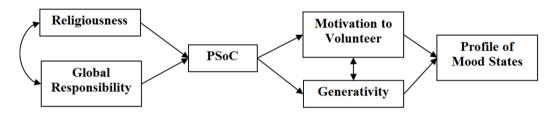


Figure 1. A conceptual model depicting the impact of religiousness and global responsibility on the profile of mood states through the mediation of psychological sense of community (Psoc), motivation to volunteer, and generativity.

# Method

#### **Participants and Procedure**

There were 143 older Italian participants, ranging in age from 60 to 86 years (M = 68.5, SD = 5.86). 86 (60%) were female and 57 (40%) were male. The majority of the volunteers (49.3%) had a high school degree, and 19% a university degree, all retired. The participants were recruited from several volunteering associations. Researchers contacted the agencies and asked the representative to go to the association to present the research project and ask their older volunteers (over 60 yrs old volunteers) to collaborate.

The volunteers declared to be volunteering for a mean of 7.3 hours per week (min 1 hour to a max of 35 hours, SD = 6.05) and that they were volunteering for a mean of 13.11 years (min 1 to max of 55 years). The majority of them declared to be involved in social assistance (66.9%), 21.9% in educational activities, 8.4% in health care and 2.8% in professional training activities. Two main criteria were used to determine the participants eligibility in this study. They all had to have been volunteering in their community and able to complete the questionnaire by themselves.



In order to test the hypotheses, a descriptive methodology will be provided. A cross-sectional study design involving all the aforementioned variables will be carried out.

#### Instrument

The participants filled out a self-administered paper-and-pencil questionnaire. The respondents were informed that all the information was confidential and subpoena protected. The self-administered report investigated: Religiousness, sense of global responsibility, psychological sense of community, motivation to volunteer, generativity, and psychological well-being.

**Religiousness** — The construct of religiousness was measured using the Brief Multidimensional Measure of Religiousness (Idler et al., 2003). The participants were assessed on a 5-point scale (from 1 = strongly disagree to 5= strongly agree) for a total of 34 items. The reliability value was .95. Item examples include: "I have a sense of religious mission or calling in my own life," or "I feel a deep sense of religious responsibility for reducing pain and suffering in the world."

**Sense of Global Responsibility** — Sense of global responsibility was measured using the sense of global responsibility scale by Malsch (2005). The participants were assessed on a 5-point scale (from 1 = strongly disagree to 5 = strongly agree) on a 5 item scale. An example of an item was: "I feel a responsibility to contribute to improving the welfare of all people in need." Cronbach's alpha value = .90.

**Psychological Sense of Community** — The psychological sense of community (PSoC) was measured by the 15-item psychological sense of community scale (McMillan & Chavis, revised by A. M. Omoto, personal communication, 2003). An example of an item was: "I feel a sense of attachment and belonging to my community." Participants were assessed on a 5-point scale (from 1 = strongly disagree to 5 = strongly agree). Cronbach's alpha value = .90.

**Motivation to Volunteer** — Motivations for volunteering were measured by the Volunteer Function Inventory (Clary et al., 1998). Participants were assessed on a 25-item scale. They had to respond on a 5-point scale (1 = not at all important to 5 = extremely important). Item examples were: "Because I enjoy helping other people," or "Because I care about other people in general." Cronbach's alpha value = .92.

**Generativity** — Generativity, theorized by McAdams (1995), was measured with the Loyola Generativity Scale (McAdams & de St. Aubin, 1992). The participants were assessed on a 5-point scale (from 1 = strongly disagree to 5 = strongly agree). Originally a 20 item scale, in our questionnaire we used only 11 items of the original version. Cronbach's alpha value = .88. Item examples were: "I feel that other people need me," or "I have important skills I can pass along to others."

**Psychological Well-Being** — Psychological well-being was measured by the Short form of the Profile of Mood States (POMS) scale (Curran, Andrykowski, & Studts, 1995). This scale measures the psychological distress responding to the question "How have you been feeling during the past week including today?" on a 5-point likert scale (0 = not at all and 5 = extremely). The scale comprises 6 domains (fatigue-inertia, vigor-activity, tension-anxiety, depression-dejection, anger-hostility, and confusion-bewilderment). One score for overall psychological distress was considered. Cronbach's alpha value = .84. Lower levels of PoMS mean better well-being.



# Results

Relationships among variables and descriptive statistics are reported in Table 1.

PoMS is significantly related to generativity (.31) and motivation to volunteer (.32). PSoC is strongly connected to all the variables considered. PSoC is strictly correlated to global responsibility (.52) and religiousness (.41). A lower value correlates PSoC with generativity (.26). PSoC is also strongly correlated to motivation to volunteer (.41).

Table 1

Correlation Matrix Across all the Variables, Means and Standard Deviations

Model Variables	1	2	3	4	5	6
1. PSoC	-	-	-	-	-	
2. Religiousness	.41**	-	-	-	-	
3. Generativity	.24**	.23*	-	-	-	
4. Global Responsibility	.52**	.41**	.08	-	-	
5. Motivation to Volunteer	.41**	.12	.33**	.17	-	
6. Profile of Mood States	.07	06	.31**	01	.32**	-
М	3.44	3.21	2.29	3.83	2.35	1.70
SD	.83	.77	.67	.89	.59	.59

<sup>\*</sup>p < .05. \*\*p < .01.

If we observe the means (see Table 1), we notice that the participants show good levels of well-being (PoMS = 1.70), high levels of PSoC (3.4) and global responsibility (3.8). Another value warranting attention is religiousness (3.2). Older volunteers find meaning in their life through religion.

The results of the modelling are summarized conceptually in Figure 1. To investigate the factors that account for the profile of mood states, a number of variables were considered as antecedents for the PoMS (see Figure 2). As shown in Figure 2, religiousness and global responsibility determine the PSoC that is responsible for motivation to volunteer and generativity. These latter determine the PoMS variable directly.

The adequacy of a structural model is determined by a Chi-square test ( $\chi^2$ ). This test evaluates how well the covariance matrix implied by the model fits the covariance matrix of the observed data. However, since the Chi-square is heavily influenced by sample size (Bollen & Long, 1994), several fit indices have been proposed as aids to model fitting (Bentler, 1990; Jöreskog & Sörbom, 1981). The fit index that has been suggested as the most appropriate is the Comparative Fit Index (CFI) because it has a 0-1 range, a small sampling variability and is unaffected by sample size (Bentler, 1990; Garrett, Ferron, Ng'Andu, Bryant, & Harbin, 1994). Root Means Square Error of Approximation (RMSEA) describes the acceptable error level. Indices less than .08 are considered acceptable. Its 90% confidence interval index is also highlighted.

The SEM analyses were conducted using AMOS (Analysis of Moment Structures, Byrne, 2001). In this particular study, we use a path analysis. The path analysis model is one of the models often tested. Path analysis allows to build a model without involving latent factors.



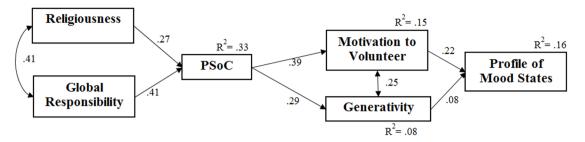


Figure 2. Results of path analysis.

*Note.* All paths are significant (p < .005). Model fit:  $\chi^2(7) = 7.63$ , p = .366,  $\chi^2/df = 1.09$ , CFI = .994, RMSEA = .025, 90% CI [.000, .108].

Our model was confirmed with good fit indices:  $\chi^2(7) = 7.63$ , p = .366, CFI = .994, and RMSEA = .025, 90% CI [.000, .108]. PoMS is predicted by religiousness and global sense of responsibility through PSoC, motivation to volunteer and generativity.

In detail, the model presents good explained variance percentages for PoMS ( $R^2$  = .16), motivation to volunteer ( $R^2$  = .15), and PSoC ( $R^2$  = .33). All the paths are significant (p < .005). The two antecedents of PoMS are generativity (r = .08) and motivation to volunteer (r = .22). These latter are predicted by PSoC (respectively r = .29 and .39). PSoC is predicted by religiousness (r = .27), and global responsibility (r = .41).

# **Discussion**

This study expands the current literature examining older volunteers by considering the effects of volunteering and being connected to one's own community on the well-being of older volunteers. This study also furthers our understanding of how being religious and feeling responsible for the welfare of people in need is related to the psychological sense of being part of a community with a clear impact on the motivation to volunteer and the feeling of being generative. This pattern is sought to be determinant on the well-being of older volunteers.

Retirement brings new opportunities and concerns regarding how one will spend his/her own time. Older people can participate in leisure activities or other productive activities such as volunteer or paid work (Wang, Adams, Beehr, & Shultz, 2009). Literature on older volunteers demonstrates the benefits deriving from such activities both for the individual as well as for the community of belonging (Adams & Rau, 2011; Wahrendorf & Siegrist, 2010), but no literature was found to underline the role of PSoC in older volunteers, and old people in general, in increasing their perceived psychological well-being.

As age increases, many roles central to identity, such as working roles, are lost or heavily decreased. This condition forces old people to create new roles, and that of being a volunteer seems to fulfill their need to feel useful to society (Wahrendorf & Siegrist, 2010).

In the present work, we highlight how older volunteers are characterized by a good level of psychological well-being. Older moods (in terms of a better psychological distress) are the result of a community commitment. In addition, the "Foresight Report on facets and preconditions of wellbeing of families in Europe" (Kapella et al., 2011) highlights how the involvement in society in terms of citizenship and participation through engagement in NGOs and voluntary works is one of the key dimensions of the wellbeing of the family. The report highlights how



involvement in society "should not only be understood in terms of active personal engagement in society, but also in terms of how well the person is integrated in (or excluded from) society" (Kapella et al., 2011, p. 11). In other words, the perceived level of psychological well-being is the result of the integration and the inclusion of a person in her/his community of belonging (Gorrese & Ruggieri, 2013). A psychological sense of community expresses this concept. According to McMillan and Chavis (1986), integration in the community, the belonging component of the construct, is one of the components of the psychological sense of community. A psychological sense of community is a real mediator between ideals and motivations, with the present study demonstrating this connection.

Our study could explain that religiousness along with a sense of global responsibility are good predictors of a psychological sense of community. This latter is a predictor of motivation to volunteer and generativity, responsible for psychological well-being.

Scholars agree in considering volunteerism as an important activity to promote older well-being. Since motivations are one of the best predictors of length of service as well as retention of volunteers by organizations (Snyder & Omoto, 2008), we recommend improving the commitment of older people to their community through actions (such as church attendance) that allow them to feel a connection or sense of belonging to it: In other words, to feel a psychological sense of community.

PSoC can be generated or promoted through the implementation of religiousness or a greater sense of responsibility. Churches, church sponsored social services, or social agencies, more generally, can be good starting points for encouraging a positive attitude throughout the community.

In accordance with Martinez, Crooks, Kim, and Tanner (2011), we posit that significant barriers need to be removed to facilitate greater participation of all older people in both formal and informal activities of volunteerism and civic engagement.

In summary, this study demonstrates the importance of intervening on the context in order to favour the inclusion of older people in the community of belonging through activities such as volunteerism. The more older people are included, the more they feel to belong to a community and to experiment stronger social bonds, the more they will be motivated to continue volunteering. This latter can be a key construct in developing length of service. Clear effects on the health of older people are recognized worldwide.

In conclusion, this study highlights that PSoC has a clear impact on sustaining motivations to volunteer and generativity and these latter on well-being. As suggested by Marta and Pozzi (2008) sustaining motivations to volunteer has a great importance for volunteer identity and length of service (Marta, Manzi, Pozzi, & Vignoles, 2014; Marzana, Marta, & Pozzi, 2012). For this reason, favouring the connection of older people in their community of belonging and increasing their PSoC through social agencies such as churches can favour their motivations to stay active in their community (probably for a long time), thus experiencing a better psychological well-being. Having old people feeling better can have an impact on the social capital. This latter is responsible for a reduction of social assistance costs.

#### **Limitations and Future Research Directions**

The findings presented must be considered in light of several limitations. First, a longitudinal study could be useful in verifying the stability of the model over time as well as to check the direction of relationships: In fact, in literature, diverse models (Brodsky et al., 1999; Chavis & Wandersman, 1990; Mannarini & Fedi, 2009) demonstrate the



reciprocity and the bi-directionality of the relationship between PSoC and social participation. Hence, these two processes develop in parallel and, at the same time, mutually reinforce positively. A longitudinal study with at least three waves would permit to highlight the presence of this mutual positive reinforcement between PSoC and participation.

Second, these results could be further verified by including a control group, although some of the variables considered as motivations to volunteer should be excluded from the model.

Although it can be assumed that the model presented can also be useful in explaining the retention of volunteers and then suggest an even better psychological well-being resulting from the prolonged commitment, we should develop a set of studies to confirm this assumption by also introducing the "intention to continue variable" and verify through a longitudinal method the actual duration of the commitment and improvement of psychological well-being.

It would be interesting to test the model with cross-cultural samples.

## **Funding**

The authors have no funding to report.

## **Competing Interests**

The authors have declared that no competing interests exist.

# **Acknowledgments**

The authors have no support to report.

## References

- Adams, G. A., & Rau, B. L. (2011). Putting off tomorrow to do what you want today: Planning for retirement. *The American Psychologist*, 66(3), 180-192. doi:10.1037/a0022131
- Antonucci, T. C., Okorodudu, C., & Akiyama, H. (2002). Well-being among older adults on different continents. *Journal of Social Issues*, *58*(4), 617-626. doi:10.1111/1540-4560.00280
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246. doi:10.1037/0033-2909.107.2.238
- Bollen, K. A., & Long, J. S. (1994). Testing structural equation models. Newbury Park, CA: Sage.
- Bond, J. (1982). Volunteering and life satisfaction among older adults. Canadian Counsellor, 16, 168-172.
- Brodsky, A. E., O'Campo, P. J., & Aronson, R. E. (1999). PSOC in community context: Multi-level correlates of a measure of psychological sense of community in low-income, urban neighborhoods. *Journal of Community Psychology, 27*, 659-679. doi:10.1002/(SICI)1520-6629(199911)27:6<659::AID-JCOP3>3.0.CO;2-#
- Burr, J. A., Tavares, J., & Mutchler, J. E. (2011). Volunteering and hypertension risk in later life. *Journal of Aging and Health*, 23(1), 24-51. doi:10.1177/0898264310388272



- Byrne, B. (2001). Structural equation modeling with AMOS. Mahwah, NJ: Lawrence Erlbaum.
- Chavis, D. M., & Wandersman, A. (1990). Sense of community in the urban environment: A catalyst for participation and community development. *American Journal of Community Psychology, 18*, 55-81. doi:10.1007/BF00922689
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivation of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*, 1516-1530. doi:10.1037/0022-3514.74.6.1516
- Curran, S. L., Andrykowski, M. A., & Studts, J. L. (1995). Short form of the Profile of Mood States (POMS-SF): Psychometric information. *Psychological Assessment*, 7, 80-83. doi:10.1037/1040-3590.7.1.80
- Cutler, S. J., Hendricks, J., & O' Neill, G. (2011). Civic engagement and aging. In R. Binstock & L. George (Eds.), *Handbook of aging and the social sciences* (7th ed., pp. 221-233). San Diego, CA: Elsevier Academic Press.
- Einolf, C. J. (2011). The link between religion and helping others: The role of values, ideas, and language. *Sociology of Religion*, 72, 435-455. doi:10.1093/socrel/srr017
- Erikson, E. H. (1963). Childhood and society. New York, NY: Norton.
- Fengler, A. P. (1984). Life satisfaction of subpopulations of elderly. *Research on Aging, 6*, 189-212. doi:10.1177/0164027584006002003
- Fetzer Institute & the National Institute on Aging Working Group. (2003). *Multidimensional Measurement of Religiousness/*Spirituality for Use in Health Research: A report of the Fetzer Institute/ National Institute on Aging Working Group. Retrieved from http://www.fetzer.org/resources/multidimensional-measurement-religiousnessspirituality-use-health-research
- Fothergill, K. E., Ensminger, M. E., Robertson, J., Green, K. M., Thorpe, R. J., & Juon, H. S. (2011). Effects of social integration on health: A prospective study of community engagement among African American women. *Social Science & Medicine*, 72(2), 291-298. doi:10.1016/j.socscimed.2010.10.024
- Garrett, P., Ferron, J., Ng'Andu, N., Bryant, D., & Harbin, G. (1994). A structural model for the developmental status of young children. *Journal of Marriage and the Family, 56*, 147-163. doi:10.2307/352710
- Gorrese, A., & Ruggieri, R. (2013). Peer attachment and self-esteem: A meta-analytic review. *Personality and Individual Differences*, *55*, 559-568. doi:10.1016/j.paid.2013.04.025
- Greenfield, E. A., & Marks, N. F. (2004). Formal volunteering as a protective factor for older adults' psychological well-being. The Journals of Gerontology: Series B. Psychological and Social Sciences, 59B(5), S258-S264. doi:10.1093/geronb/59.5.S258
- Harlow, R. E., & Cantor, N. (1996). Still participating after all these years: A study of life task participation in later life. *Journal of Personality and Social Psychology*, 71, 1235-1249. doi:10.1037/0022-3514.71.6.1235
- Harris, A. H. S., & Thoresen, C. E. (2005). Volunteering is associated with delayed mortality in older people: Analysis of the longitudinal study of aging. *Journal of Health Psychology*, 10(6), 739-752. doi:10.1177/1359105305057310
- Hinterlong, J. E., Morrow-Howell, N., & Rozario, P. A. (2007). Productive engagement and late life physical and mental health: Findings from a nationally representative panel study. *Research on Aging*, 29(4), 348-370. doi:10.1177/0164027507300806



- Idler, E. L., Musick, M. A., Ellison, C. G., George, L. K., Krause, N., Ory, M. G., . . . Williams, D. R. (2003). Measuring multiple dimensions of religion and spirituality for health research. *Research on Aging*, 25, 327-365. doi:10.1177/0164027503025004001
- Jöreskog, K. G., & Sörbom, D. (1981). LISREL V [Computer software]. Mooresville, IN: Scientific Software.
- Kapella, O., de Liedekerke, A.-C., & de Bergeyck, J. (Eds.). (2011). Foresight report: Facets and preconditions of wellbeing of families. Retrieved from https://eldorado.tu-dortmund.de/handle/2003/27688
- Lemon, B. W., Bengtson, V. L., & Peterson, J. A. (1972). An exploration of the activity theory of aging: Activity types and life satisfaction among in-movers to a retirement community. *Journal of Gerontology*, 27, 511-523. doi:10.1093/geronj/27.4.511
- Longino, C. F., & Kart, C. S. (1982). Explicating activity theory: A formal replication. *Journal of Gerontology*, 37, 713-722. doi:10.1093/geronj/37.6.713
- Lum, T. Y., & Lightfoot, E. (2005). The effects of volunteering on the physical and mental health of older people. *Research on Aging*, 27, 31-55. doi:10.1177/0164027504271349
- Luoh, M.-C., & Herzog, A. R. (2002). Individual consequences of volunteer and paid work in old age: Health and mortality. *Journal of Health and Social Behavior, 43*(4), 490-509. doi:10.2307/3090239
- Malsch, A. (2005). *Prosocial behavior beyond borders: Understanding a psychological sense of global community* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3175058)
- Mannarini, T., & Fedi, A. (2009). Multiple senses of community: The experience and meaning of community. *Journal of Community Psychology*, *37*(2), 211-227. doi:10.1002/jcop.20289
- Mannino, C. A., Snyder, M., & Omoto, A. M. (2011). Why do people get involved? Motivations for volunteerism and other forms of social action. In David Dunning (Ed.), *Social motivation* (127-146). New York, NY: Psychology Press.
- Markides, K. S. (1983). Aging, religiosity, and adjustment: A longitudinal analysis. *Journal of Gerontology*, *38*(5), 621-625. doi:10.1093/geronj/38.5.621
- Marta, E., Manzi, C., Pozzi, M., & Vignoles, V. (2014). Identity and the theory of planned behavior: Predicting maintenance of volunteering after three years. *The Journal of Social Psychology, 154*(3), 198-207. doi:10.1080/00224545.2014.881769
- Marta, E., & Pozzi, M. (2007). Psicologia del volontariato [Psychology of volunteerism]. Rome, Italy: Carocci Editore.
- Marta, E., & Pozzi, M. (2008). Young people and volunteerism: A model of sustained volunteerism during the transition to adulthood. *Journal of Adult Development, 15*(1), 35-46. doi:10.1007/s10804-007-9033-4
- Marta, E., Pozzi, M., & Marzana, D. (2010). Volunteers and ex-volunteers: Paths to civic engagement through volunteerism. Psykhe – Revista de la Escuela de Psicología de la Pontificia Universidad Católica de Chile, 19(2), 5-17. doi:10.4067/S0718-22282010000200002
- Martinez, I. L., Crooks, D., Kim, K. S., & Tanner, E. (2011). Invisible civic engagement among older adults: Valuing the contributions of informal volunteering. *Journal of Cross-Cultural Gerontology*, 26(1), 23-37. doi:10.1007/s10823-011-9137-y
- Marzana, D., Marta, E., & Pozzi, M. (2012). Social participation in young adults: Voluntary and political action. *Journal of Adolescence*, 35(3), 497-507. doi:10.1016/j.adolescence.2011.08.013



- McAdams, D. P. (1995). What do we know when we know a person? *Journal of Personality*, 63, 365-396. doi:10.1111/j.1467-6494.1995.tb00500.x
- McAdams, D. P. (2006). The redemptive self: Stories Americans live by. New York, NY: Oxford University Press.
- McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology, 62*, 1003-1015. doi:10.1037/0022-3514.62.6.1003
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology, 14*, 6-23. doi:10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I
- Mellor, D., Hayashi, Y., Stokes, M., Firth, L., Lake, L., Staples, M., . . . Cummins, R. (2009). Volunteering and its relationship with personal and neighborhood well-being. *Nonprofit and Voluntary Sector Quarterly, 38*(1), 144-159. doi:10.1177/0899764008317971
- 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*, 1612-1638. doi:10.1086/229941
- Morrow-Howell, N., Hinterlong, J., Rozario, P. A., & Tang, F. (2003). Effects of volunteering on the well-being of older adults. The Journals of Gerontology: Series B. Psychological and Social Sciences, 58B, S137-S145. doi:10.1093/geronb/58.3.S137
- Morrow-Howell, N., Hong, S., & Tang, F. (2009). Who benefits from volunteering? Variations in perceived benefits. *The Gerontologist*, 49(1), 91-102. doi:10.1093/geront/gnp007
- Musick, M. A., Herzog, A. R., & House, J. S. (1999). Volunteering and mortality among older adults: Findings from a national sample. *Journals of Gerontology: Series B. Psychological and Social Sciences*, *54B*(3), S173-S180. doi:10.1093/geronb/54B.3.S173
- Musick, M. A., & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science & Medicine*, *56*(2), 259-269. doi:10.1016/S0277-9536(02)00025-4
- Musick, M. A., & Wilson, J. (2008). Volunteers: A social profile. Bloomington, IN: Indiana University Press.
- Narushima, M. (2005). "Payback time": Community volunteering among older adults as a transformative mechanism. *Ageing and Society*, 25(4), 567-584. doi:10.1017/S0144686X05003661
- Okun, M. A., August, K. J., Rook, K. S., & Newsom, J. T. (2010). Does volunteering moderate the relation between functional limitations and mortality? *Social Science & Medicine*, *71*(9), 1662-1668. doi:10.1016/j.socscimed.2010.07.034
- Okun, M. A., & Michel, J. (2006). Sense of community and being a volunteer among the young-old. *Journal of Applied Gerontology*, 25(2), 173-188. doi:10.1177/0733464806286710
- Okun, M. A., O'Rourke, H. P., Keller, B., Johnson, K. A., & Enders, C. (2014). Value-expressive volunteer motivation and volunteering by older adults: Relationships with religiosity and spirituality. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*. Advance online publication. doi:10.1093/geronb/gbu029
- Oman, D., Thoresen, C., & McMahon, K. (1999). Volunteerism and mortality among community-dwelling elderly. *Journal of Health Psychology*, *4*, 301-316. doi:10.1177/135910539900400301



- Omoto, A. M., & Malsch, A. (2005). Psychological sense of community: Conceptual issues and connections to volunteerism-related activism. In A. M. Omoto (Ed.), *Processes of community change and social action* (pp. 83-102). Mahwah, NJ: Erlbaum.
- Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 68, 671-686. doi:10.1037/0022-3514.68.4.671
- Omoto, A. M., Snyder, M., & Martino, S. C. (2000). Volunteerism and the life course: Investigating age-related agendas for action. *Basic and Applied Social Psychology*, *22*, 181-197. doi:10.1207/S15324834BASP2203 6
- Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionist perspective. *Journal of Social Issues*, *58*(3), 447-467. doi:10.1111/1540-4560.00270
- Piliavin, J. A. (2005). Feeling good by doing good: Health consequences of social service. In A. M. Omoto (Ed.), *Processes of community change and social action* (pp. 29-50). Mahwah, NJ: Lawrence Erlbaum.
- Principi, A., Chiatti, C., & Lamura, G. (2012). Motivations of older volunteers in three European countries. *International Journal of Manpower*, *33*(6), 704-722. doi:10.1108/01437721211261831
- Principi, A., Chiatti, C., Lamura, G., & Frerichs, F. (2012). The engagement of older people in civil society organizations. *Educational Gerontology*, *38*, 83-106. doi:10.1080/03601277.2010.515898
- Sarason, S. B. (1974). *The psychological sense of community: Prospects for a community psychology.* San Francisco, CA: Jossey Bass.
- Sarason, S. B. (1986). The emergence of a conceptual center. *Journal of Community Psychology, 14*, 405-407. doi:10.1002/1520-6629(198610)14:4<405::AID-JCOP2290140409>3.0.CO;2-8
- Siegrist, J., von dem Knesebeck, O., & Pollack, C. E. (2004). Social productivity and well-being of older people: A sociological exploration. *Social Theory & Health*, *2*, 1-17. doi:10.1057/palgrave.sth.8700014
- Snyder, M., & Clary, E. G. (2004). Volunteerism and the generative society. In E. de St. Aubin, D. P. McAdams, & T.-C. Kim (Eds.), *The generative society: Caring for future generations* (pp. 221-237). Washington, DC: American Psychological Association.
- Snyder, M., & Omoto, A. M. (2000). Doing good for self and society: Volunteerism and the psychology of citizen participation. In M. Van Vugt, M. Snyder, T. R. Tyler, & A. Biel (Eds.), *Cooperation in modern society: Promoting the welfare of communities, states and organizations* (pp. 127-141). Abingdon, United Kingdom: Routledge.
- Snyder, M., & Omoto, A. M. (2008). Volunteerism: Social issues perspectives and social policy implications. *Social Issues and Policy Review, 2*(1), 1-36. doi:10.1111/j.1751-2409.2008.00009.x
- Steinkamp, M. W., & Kelly, J. R. (1987). Social integration, leisure activity, and life satisfaction in older adults: Activity theory revisited. *International Journal of Aging and Human Development*, 25, 293-307. doi:10.2190/V813-QA3G-6AQC-MWYM
- Van Willigen, M. (2000). Differential benefits of volunteering across the life course. *The Journals of Gerontology: Series B. Psychological and Social Sciences*, *55B*, S308-S318. doi:10.1093/geronb/55.5.S308



Wahrendorf, M., & Siegrist, J. (2010). Are changes in productive activities of older people associated with changes in their well-being? Results of a longitudinal European study. *European Journal of Ageing*, 7(2), 59-68. doi:10.1007/s10433-010-0154-4

Wang, M., Adams, G. A., Beehr, T. A., & Shultz, K. S. (2009). Bridge employment and retirement: Issues and opportunities during the latter part of one's career. In S. G. Baugh & S. E. Sullivan (Eds.), *Maintaining focus, energy, and options over the career* (pp. 135-162). Charlotte, NC: Information Age Publishing.

Weinstein, L., Xie, X., & Cleanthous, C. C. (1995). Purpose in life, boredom, and volunteerism in a group of retirees. *Psychological Reports*, 76, 482. doi:10.2466/pr0.1995.76.2.482

Wheeler, J. A., Gorey, K. M., & Greenblatt, B. (1998). The beneficial effects of volunteering for older volunteers and the people they serve: A meta-analysis. *International Journal of Aging & Human Development*, *47*(1), 69-79. doi:10.2190/VUMP-XCMF-FQYU-V0JH

# **About the Authors**

**Maura Pozzi** is a researcher and Adjoin Professor in Social and Community Psychology (Università Cattolica del Sacro Cuore). She received a Ph.D. in Social and Developmental Psychology. She is a member of the Athenaeum Centre for Family Studies and Research. Her research interests concern volunteerism, prosocial behaviors and intergenerational dynamics in families and communities.

**Elena Marta** is a Full Professor in Social and Community Psychology (Università Cattolica del Sacro Cuore). She is a member of the Athenaeum Centre for Family Studies and Research. She is a Member of the Scientific Observatory on Volunteerism and she was Director of the Master in Psychogeriatry in the same University.

**Daniela Marzana** is a Post-doc fellow in Social and Community Psychology (Università Cattolica del Sacro Cuore). She received a Ph.D. in Social and Developmental Psychology. She is a member of the Athenaeum Centre for Family Studies and Research. Her research interests concern social action, volunteerism and political engagement.

**Caterina Gozzoli** is an Associate Professor in Work and Organization (Università Cattolica del Sacro Cuore). She is a member of the Athenaeum Centre for Family Studies and Research. She works as a trainer for volunteers and professionals in Elderly Residences. Her research interests concern older people, organizational engagement and family dynamics.

Ruggero Andrisano Ruggieri is an Assistant Professor in Dynamics Psychology (University of Salerno), has hold different positions at University of Salento including the post as lecturer in Organization Psychology and Clinical Psychology. He is member of Psychology List and he is also a Specialist in Human Resources & Organization Development. He earned a Ph.D. in Community Psychology and Training Education Models at University of Salento. His research interests concern the models of functioning of the mind and derivatives applications in different sectors according to cultural psychology and idiographic approach.

