



UC/FPCE\_2015

Universidade de Coimbra  
Faculdade de Psicologia e de Ciências da Educação

**Helping others, helping yourself: Positive effects of volunteering on women's mental health and quality of life.**

Ana Rita Valente Santiago (e-mail: [rita.anasantiago@gmail.com](mailto:rita.anasantiago@gmail.com))

Dissertação de Mestrado em Psicologia Clínica, subespecialização em Intervenções Cognitivo-Comportamentais em Perturbações Psicológicas da Saúde sob a orientação de Professora Doutora Cláudia Ferreira

## Agradecimentos

À minha orientadora, Professora Doutora Cláudia Ferreira, pelos ensinamentos, opiniões e críticas que contribuíram para o meu crescimento e para o meu empenho neste trabalho.

Aos professores da Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra que me acompanharam ao longo destes 5 anos e que com os seus conhecimentos e experiência me proporcionaram aprendizagens essenciais para a minha formação.

Às minhas colegas de investigação Joana, Laura e Dina pela partilha de conhecimentos, dúvidas e receios assim como pelas palavras de incentivo.

À Cátia e à Teresa pelos dias e noites passadas a escrever a tese, pela amizade e o entusiasmo que me deram tornando estes dias mais fáceis pelo convívio e senso de humor que as caracteriza.

Ao Petiz por sempre estar presente em momentos mais difíceis que, com a sua forma peculiar de ser, sempre conseguiu me contagiar com a sua boa disposição. À Helena pela excelente companhia de casa que é, pela amizade e pela sua disponibilidade. Às minhas madrinhas, Andreia e Pitxi, por nunca terem deixado o seu papel ao longo deste percurso académico. À Elisa, Filipa e à Catarina por incentivarem sempre os meus sonhos e ambições.

Não poderia deixar de agradecer às Instituições que se disponibilizaram em ajudar-me na recolha de amostra e se interessaram pelo meu trabalho, assim como aos participantes deste estudo. Quero, sobretudo, agradecer ao projecto “Breakup the Barriers” que me inspirou neste trabalho e a todos os meus colegas de voluntariado que me ensinaram o verdadeiro significado da palavra altruísmo. À Asiya em especial, por sempre ter estado presente com palavras de fé e força e que me incentivaram tanto.

Por fim, à minha família, à minha avó pela sua preocupação e generosidade e aos meus pais pelo apoio incondicional, por terem acreditado sempre em mim, pela força que me dão todos os dias e pelos valores transmitidos.

A todas as pessoas mencionadas e aquelas que também sabem que fizeram parte deste percurso um muito obrigada!

## **Table of Contents**

Paper I: Quality of life and volunteering activity: A comparison study between volunteer and non-volunteer women.....	1
Paper II: Does volunteering activity moderate the impact of shame on psychopathological symptoms?.....	19

## Quality of life and volunteering activity: a comparison study between volunteer and non-volunteer women

### Abstract

A considerable range of studies report an association between being currently in a volunteering activity and greater life satisfaction. This study aims to provide a better understanding of a specific population: volunteer women. Specifically, the present study establishes a comparison between volunteers and non-volunteers, and also tests the emotional regulation strategies as well as the volunteering variables hypothesized to be associated with volunteer's quality of life.

Self-reported measures were used to assess quality of life (WHOQOL-BREF) and self-compassion (SCS). Additionally, the volunteer sample was given a questionnaire to measure volunteering characteristics. Participants were 301 females, comprising two different samples: volunteers ( $N = 151$ ) and non-volunteers ( $N = 150$ ).

Results showed significant differences between the two groups: volunteers presented higher levels of quality of life and self-compassion comparing to non-volunteers. Furthermore, the results revealed that the perception of positive impact of the volunteering activity has implications on this group's levels of quality of life.

These findings strengthen the importance of volunteering activity on quality of life and provide new insights about the emotional regulation strategies involved in volunteer women's quality of life.

**Key Words:** Quality of Life, Self-compassion, Self-Judgment, Volunteering activity, Positive impact of volunteering

## Qualidade de vida e a atividade de voluntariado: um estudo de comparação entre mulheres voluntárias e não voluntárias

### Resumo

Um número considerável de estudos demonstram uma associação entre indivíduos que desempenham atualmente uma atividade de voluntariado e a existência de maiores níveis de satisfação com a vida. O objetivo deste estudo centrou-se em providenciar uma melhor compreensão de uma população específica: mulheres que fazem voluntariado. Especificamente, o presente estudo estabelece a comparação entre voluntários e não voluntários, assim como pretende testar as estratégias de regulação emocional e as variáveis do voluntariado eventualmente relacionadas com a qualidade de vida nestes sujeitos.

Medidas de autorresposta foram implementadas para avaliar a qualidade de vida (WHOQOL-BREF) e a auto-compaixão (SCS). Adicionalmente, a amostra de voluntariado foi sujeita ao preenchimento de um questionário com o intuito de medir as características do voluntariado. Participaram neste estudo 301 mulheres sendo a amostra constituída por duas amostras diferentes: voluntários ( $n = 151$ ) e não voluntários ( $n = 150$ ).

Este estudo revelou a existência de diferenças entre os dois grupos: os sujeitos voluntários apresentaram níveis mais elevados de qualidade de vida e de auto-compaixão comparativamente com os não voluntários. Além disso, os resultados revelaram que a perceção do impacto positivo da atividade de voluntariado tem importantes implicações no nível de qualidade de vida dos sujeitos deste grupo.

Estes resultados reforçam a importância que o voluntariado tem na qualidade de vida e providenciam novos dados sobre as estratégias de regulação emocional implícitas na qualidade de vida das mulheres que desempenham atividades de voluntariado.

**Palavras chave:** Qualidade de Vida, Auto-compaixão, Auto-julgamento, Voluntariado, Impacto positivo do voluntariado

## 1. Introduction

In the last decades, volunteering has instigated the interest of numerous investigations, particularly on the social and psychological domains (Bond, 2012; Choi & Kim, 2011; Piliavin & Siegl, 2007; Veerasamy, Sambasivan & Kumar, 2013, 2015). According to the literature, volunteering is considered an activity that involves spending time, knowledge or skills, with the aim of benefitting others (e.g., individuals, groups or causes) without any obligation or material compensation (Omoto & Snyder, 1995; Wilson, 2000).

Volunteering work has been consistently stated on literature as being related to greater life satisfaction, self-esteem, sense of purpose in life and also higher self-reported physical and mental health (Lum & Lightfoot, 2005; Morrow-Howell, Hinterlong, Rozario, 2003; Pavlova & Silbereisen, 2012; Piliavin, 2005; Piliavin & Siegl, 2007; Thotis & Hewitt, 2001; Van Willigen, 2000; Veerasamy, Sambasivan & Kumar, 2013, 2015; Wilson, 2012).

Furthermore, other studies proved the psychological benefits of a sustained volunteerism (Grant, 2012; Thotis & Hewitt, 2001; Piliavin & Siegl, 2007; Veerasamy, Sambasivan & Kumar, 2013, 2015): the volunteering work enhances life satisfaction through an increase on psychological well-being, which motivates further involvement on subsequent volunteering activities (Bond, 2012; Thotis & Hewitt, 2001; Veerasamy, Sambasivan & Kumar, 2013; Wilson, 2012). According to the Role Identity Theory, the continued participation in volunteering can be explained by the internalization of a volunteer's identity (Grant, 2012) which may predict the number of hours spent on volunteering activities (Grant, 2012, Grube & Piliavin, 2000). Choi and Kim (2011) showed that a moderate level of volunteering time (e.g., up to ten hours monthly) had a positive direct effect on psychological well-being, among participants of 55 or more years of age. Additionally, Musik, Herzog & House (1999) found that moderate volunteering (e.g., less than 40 hours per year) had a protective effect against mortality.

This positive impact on volunteer's life satisfaction can be explained by the Social Interest Theory (Ansbacher, 1991). According to this perspective, volunteerism is a social support phenomenon since it provides a sense of belonging and purpose in life (Su & Ferraro, 1997; Wethington, Phyllis, Glasgow & Pillemer, 2000). Furthermore, when the volunteer participates in volunteering acts, this facilitates his/her social integration (Musik & Wilson, 2003), as well as the engagement in a meaningful social role that provides access to social support (Ekerdt, 1986). For this reason, studies postulate that, when an individual has more aptitude for establishing social ties with others and engage in a meaningful action as a volunteer, this can become a "fulfilling and self-validating experience" (Krause, Herzog & Baker, 1992, p.300), and individuals become more socially accepted than those who did not develop this ability (Li & Ferraro, 2005).

Taking these findings together, this study proposes a better understanding of how social support is linked to well-being, under the evolutionary approach. In fact, human beings have an innate need of belonging, connecting, sharing and relating to others (Gilbert, 2005). In accordance with Gilbert's model, the survival, reproductive, and developmental opportunities are guaranteed when the individual is capable of creating positive feelings in the mind of others, leading to social acceptance (Gilbert, 2005; Baumeister & Leary, 1995). In this line, the ability and motivation to be responsive, helpful, and supportive of others is part of the innate repertoire of social and altruistic behaviors (Penner, Dovidio, Piliavin & Schroeder, 2005), and can be guaranteed through a compassionate attitude (Goetz, Keltner & Simon-Thomas, 2010).

Compassion, a set of abilities that involve cognitive, emotional and motivational competencies for empathic understanding, interest on others, sympathy and non-judgmental attitude (Gilbert, 2005), is associated to the activation of the affiliative/soothing system. This emotional regulation system is related to a distinct type of positive affect system, linked to opiates and oxytocin (Gilbert, 2005, 2009), which are responsible for establishing social relationships, experience safety and acceptance, and being cared for (Gilbert, 2005). In fact, positive social interactions stimulate this system by promoting feelings of soothing, affiliation, safeness and contentment (Gilbert, 2005, 2009, 2014). Specifically, when this altruistic attitude is towards oneself, it is called self-compassion (Neff, 2003a, 2004). This emotion regulation strategy is also related to the affiliation system and it is linked with a positive self-attitude which entails treating oneself with kindness, being mindful of one's painful thoughts/feelings and perceiving one's experience as part of a larger human experience, when considered negative aspects of oneself (Neff, 2003a, Neff, Rude & Kirkpatrick, 2007). According to Neff (2003a, 2003b, 2004), individuals who present higher levels of self-compassion show higher levels of psychological health, as well as less anxious and depressive symptoms, when compared to individuals who are harshly self-judgmental and tend to feel isolated when confronted with failure and painful situations, and to be over-identified with their thoughts and feelings.

In this context, one of the altruist acts which has been recently studied as a form of prolonged compassionate behavior is volunteering (Mongain, Chin & Shapira, 2011; Gillath, Shaver & Mikulincer, 2005). As literature has shown, volunteering is linked to a compassionate attitude towards others. In such a way, it is interesting to understand how volunteers might adopt the same altruistic attitude towards oneself and, consequently, how it will affect their quality of life.

Taking the theoretical and empirical evidences together, the present study's purpose is to explore the following aims. Firstly, the current study aimed to characterize the volunteer population, given that such subject is yet poorly studied. Secondly, the present research is interested to explore the differences regarding quality of life domains (physical, psychological,

environment and social), between volunteers and non-volunteers. Furthermore, the differences concerning self-compassion and self-judgment will be explored comparing these two samples. Finally, this study intends to explore which of the volunteering variables are more significantly related to the quality of life. In accordance with the literature, volunteers would experience greater quality of life than non volunteers. Also, this study hypothesizes that volunteers would have higher levels of self-compassion comparatively to non-volunteers. According to the previous studies, it is expected that one possible volunteering variable associated with quality of life may be the hours spent on volunteering activity.

## 2. Material and Methods

### 2.1. Participants

This study comprises two different samples: 151 (50.2%) women who are currently volunteering and 150 (49.8%) women who do not volunteer at the time. The total sample included 301 females aged from 18 to 60 years old. Descriptive demographic variables of the sample are presented in Table 1.

The volunteers sample presented a mean age of 30.50 ( $SD = 11.36$ ) and 15.11 ( $SD = 2.79$ ) years of education, whereas non-volunteers showed a mean age of 28.85 ( $SD = 11.44$ ) and 14.13 ( $SD = 2.61$ ) years of education. The two samples did not present significant differences in age ( $t_{(299)} = -1.255$ ;  $p = .210$ ). Nevertheless, regarding years of education, results indicated that volunteer participants presented a significantly higher level of education in comparison to non volunteers ( $t_{(299)} = -3.14$ ;  $p = .002$ ).

Furthermore, regarding to marital status, the two samples also did not demonstrate significant differences ( $\chi^2_{(4)} = 1.72$ ;  $p = .787$ ), given that the majority of the participants were single (volunteers = 70.2%; non volunteer = 72.7%).

Finally, socioeconomic status were evaluated in accordance to the professional activity, taking into account three different levels (1 = low; 2 = medium; 3 = high; Simões, 1994). In relation to professional activity, the two samples in this study did not present significant differences ( $\chi^2_{(5)} = 12.10$ ;  $p = .033$ ). The predominant profession was “student” (volunteers = 46.4%; non volunteer = 44.7%), followed by a medium socioeconomic status (volunteers = 29.1%; non volunteer = 26.7%); (Simões, 1994).

**Table 1.** Sample demographic characteristics ( $N = 301$ ).

	Volunteers ( $N=151$ )		Non Volunteers ( $N=150$ )	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<b>Age</b>	30.50	11.36	28.85	11.44
<b>Education</b>	14.13	2.61	15.11	2.79



	Volunteers (N=151)		Non Volunteers (N=150)		Total (N=301)	
	N	%	N	%	N	%
<b>Marital state</b>						
Single	106	70.2%	109	72.7%	215	71.4%
Married	35	23.2%	34	22.7%	69	22.9%
Separated	8	5.3%	4	2.7%	12	4%
Widower	1	0.7%	2	1.3%	3	1%
<b>Profession/SES</b>						
1 - Low	7	4.6%	23	15.3%	30	10%
2 - Medium	44	29.1%	40	26.7%	84	27.9%
3 - High	14	9.3%	13	8.7%	27	9%
Unemployed	11	7.3%	6	4%	17	5.6%
Student	70	46.4%	67	44.7%	137	45.5%
Reformed	4	2.6%	1	0.7%	5	1.7%

SES- Socioeconomic Status; 1 - Low socioeconomic status; 2 - Medium socioeconomic status; 3 - High socioeconomic status.

## 2.2.Measures

*Demographic Data.* Before completing self-report measures, the participants were asked to report age, educational level, professional activity and marital status.

*Volunteering variables.* Volunteering characteristics were measured taking into account: the number of volunteering hours, the time spent on volunteering, the main domain of volunteering activity, the target population, and impact on self and impact on others.

Under the format of an open question, ‘hours doing volunteering’ were evaluated, e.g., the average of the hours spent on volunteering work (e.g., “On average, about how many hours per month did you spend doing volunteering work?”), and also ‘time spent on volunteering’, e.g., the time (in months) invested in volunteering since the beginning of volunteering work (e.g., “On average, how long had you started the volunteering work?”).

Through multiple-choice questions, participants were instructed to answer about the main area of volunteering work (‘volunteering activity’), having seven different options available: environment, sports and leisure; rights and citizenship; culture and arts; education; health; social solidarity; other(s). Moreover, the same type of question was used to evaluate the ‘target population’ associated to the volunteering work, with seven options of answer: children and youth, including physical diseased; adults and general community; pregnant women and infants; adults with a disease; older people and/or in physical dependence situation; people in disadvantaged socioeconomic condition or in a situation of risk (e.g.,

domestic violence; negligence); other(s). The principal motivation for volunteering ('motives for volunteering') was assessed, by asking participants to choose one among six available options (religiousness; appreciation of curriculum; to occupy free times; to meet new people; pleasure to take care of other(s) or helping other(s); Other(s)). In a 10-point semantic differential scale (1- *without positive impact*; 10- *with a lot of positive impact*) it was measured the 'impact on self' (e.g., "To what extent do you perceive your volunteering activity had a positive impact in your life?") and the 'impact on others' (e.g., "To what extent do you perceive your volunteering activity had a positive impact on other's life?").

Self-reported measures were completed by participants of both samples, accessing quality of life and self-compassion.

*World Health Organization Quality of Life* (WHOQOL Group, 1998; Portuguese version by Vaz-Serra et al., 2006). WHOQOL is a simplified version of the WHOQOL-100 (WHOQOL Group, 1995) comprising 26 items that measure the self-perception with four dimensions: physical health, psychological health, social relationships and environment. The first two items are examined separately: the first one refers to the individual overall perception of the quality of life (*How would you rate your quality of life?*), and the second one regards the overall perception of health (*How satisfied are you with your health?*). Those two items are rated on a 5-point scale, in the first domain 1-*very poor*, 5-*very good*; the second one 1-*very dissatisfied*, 5- *very satisfied*. The other items are rated on a 5-point response scale, 1-*not at all* to 5-*completely*. Higher scores indicate greater quality of life. The Portuguese version of the scale presents high internal consistency (physical  $\alpha = .87$ ; psychological  $\alpha = .84$ ; social  $\alpha = .64$ ; environmental  $\alpha = .78$ ). In the current study the Cronbach's alpha values obtained for the volunteer sample were .71, .76, .71, .73 and in non-volunteers sample were .80, .80, .73, .80 for each respective domain.

*Self-Compassion Scale* (SCS; Neff, 2003b; Portuguese version by Castilho & Pinto-Gouveia, 2011). SCS is a self-report instrument with 26 items measured in a 5-point likert scale, ranging from 1 (*almost never*) to 5 (*almost always*) to evaluate two main components: a positive one assess self-compassion that includes the components of self-kindness (e.g., *I try to be understanding and patient toward aspects of my personality I don't like*), common humanity (e.g., *I try to see my failings as part of the human condition*) and mindfulness (e.g., *when something painful happens I try to take a balanced view of the situation*) subscales; and the negative one comprise components of self-judgment (e.g., *I'm disapproving and judgmental about my own flaws and inadequacies*), isolation (e.g., *when I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world*) and over-identification (e.g., *when I'm feeling down I tend to obsess and fixate on everything that's wrong*).

The SCS presents good internal consistency in the original (.92; Neff, 2003b) and in the Portuguese version (.89; Castilho & Pinto-Gouveia, 2011). In this study, we used two composite measures both with great internal

consistency in the two samples. In both groups, alpha values were .80 in self-compassion components. Regarding self-judgment components internal consistency were .92 and .91, in the volunteers and non volunteers sample, respectively.

### **2.3. Procedure**

The present study is part of a more comprehensive research that explores the different emotional regulation strategies implied on quality of life and mental health in women aged from 18-60 years old.

The volunteers were recruited through an initial contact with several volunteering institutions, via e-mail and personally. Non volunteers were recruited from the general population, as a convenience sample.

All respondents completed the self-report measures in educational and corporate settings, personally, after giving their written informed consent. In line with ethical requirements, it was emphasized that participants' cooperation was voluntary and their answers were confidential.

In the volunteer's sample, a questionnaire was designed to measure volunteering characteristics. Then, a battery of self-report questionnaires was completed by all participants, volunteers and non volunteers, to assess quality of life and self-compassion.

Therefore, concerning the goal of this study, the data were cleaned in order to exclude: male subjects, participants that failed to fill within the considered age interval (18-60 years) and unfilled questionnaires.

### **2.4. Analytic strategy**

The data analysis was performed using SPSS 22 (IBM Corp, 2014). Descriptive statistics were performed (mean and standard deviation) in order to analyze the differences of the characteristics of volunteering samples, self-compassion and quality of life.

T-tests for two independent samples were tested for differences in self-compassion and quality of life between the samples. Bivariate statistics using Product-moment Pearson correlation analyses were conducted to understand the relationships between those constructs.

## **3. Results**

### **3.1. Characteristics of volunteering sample**

Regarding the characteristics of volunteering sample, the major area of volunteering activity chosen was social solidarity with 50.3%. About 72.8% selected "pleasure to take care of other(s) or helping other(s)" as the principal motive for volunteering and "Children and Youth" (16.6%) was the most frequent target population of volunteering work. Volunteers presented an average of 15.60 ( $SD = 20.64$ ) hours per month spent on volunteering work (minimum of 1 hour and maximum 160 hours per month) whereas the time spent between 4 and 11 hours was the most frequent (38.4%). On average, volunteers started their volunteering work about 30.14 ( $SD = 38.37$ ) months before (minimum 1 month and maximum 180 months) which the

period of time most frequent doing volunteer work was between 1 and 2 years (33.3%), followed by the permanence less than 1 year doing volunteer work (24,5%). Respecting the dimensions that assess volunteering impact on a 10-point scale, volunteers presented a positive impact on their life's ( $M = 8.49$ ;  $SD = 1.87$ ) and on other's life ( $M = 8.14$ ;  $SD = 1.74$ ). Table 2 presents the characteristics of volunteering sample.

**Table 2.** Characteristics of volunteering sample ( $N = 151$ )

Domain		<i>N</i>	%
<b>Volunteering activity</b>			
	Environment, sports and leisure;	3	2.0
	Rights and citizenship;	7	4.6
	Culture and arts;	3	2.0
	Education;	14	9.3
	Health;	33	21.9
	Social solidarity;	76	50.3
	Other(s)	7	4.6
<b>Motives for volunteering</b>			
	Religiousness	6	4.0
	Curriculum appreciation;	2	1.3
	Free time occupation	2	1.3
	Meet new people;	2	1.3
	Pleasure to take care/ help other(s);	110	72.8
	Other(s)	6	4.0
<b>Target Population</b>			
	Children and youth	44	29.1
	Adults/Community;	29	19.2
	Pregnant women/Infants;	1	0.7
	Adults with disease;	15	9.9
	Older people/Physical dependence situation;	12	7.9
	Disadvantaged socio-economic condition	23	15.2
	Other(s)	4	2.6
<b>Hours Volunteering</b>			
	< 4h per month	6	4.1
	4-11h per month	58	38.4
	12-19h per month	41	27.2
	20-27h per month	8	5.4
	28-35h per month	8	5.3
	≥ 36h per month	7	4.8
<b>Time Volunteering</b>			
	Until 1 Year	37	24.5
	1- 2 years	50	33.3
	2- 4 years	17	11.3

	> 4 years	20	13.4
	<i>M</i>		<i>SD</i>
<b>Impact on Self</b>	8.49		1.87
<b>Impact on Others</b>	8.14		1.74

### 3.2. Comparisons Between Groups

To explore differences between the two groups, means and standard deviations were analyzed (Table 3).

Regarding self-compassion, volunteer subjects revealed statistically significant higher scores in self-compassion, compared to non-volunteers. Furthermore, volunteers showed statistically significant lower levels of self-judgment, comparing to non-volunteers.

In relation to quality of life, significant differences were found between the two groups, except for the social dimension. According to these results, people who are currently doing volunteering work presented a higher satisfaction with health in physical and psychological domains, and also in environmental dimension, than those who are not in a volunteering activity. In general, volunteers showed higher levels of quality of life than non-volunteers.

**Table 3.** Means and standard deviation of self-compassion (SCS) and quality of life variables (WHOQOL-BREF)

	Volunteers ( <i>N</i> = 151)		Non volunteers ( <i>N</i> = 150)		<i>F</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<b>Self-compassion</b>	3.35	0.64	3.12	0.64	-3.043	.003
<b>Self-judgment</b>	2.57	0.76	2.76	0.72	2.186	.030
<b>Quality of Life</b>						
<b>Physic.</b>	78.57	12.00	74.83	14.67	-2.408	.017
<b>Psychol.</b>	74.38	12.01	69.93	14.01	-2.942	.004
<b>Environ.</b>	73.07	11.05	67.41	13.28	-4.001	.000
<b>Social</b>	72.77	17.10	71.70	18.38	-.517	.606

Quality of life dimensions (WHOQOL): Physic. = Physical; Psychol.= Psychological; Environ. = Environmental

### 3.3. Correlations

To explore the relationships between self-compassion and quality of life variables, Pearson product-moment correlations were conducted (Table 4).

Regarding the volunteers sample, results showed a positive correlation between self-compassion and all domains of quality of life (physical, psychological, social, environmental). The correlation had a higher magnitude between self-compassion and psychological dimension.

Self-judgment was negatively associated with quality of life dimensions with a higher magnitude in psychological dimension.

In the non-volunteers group, the correlation was significant and negative between self-judgment and psychological dimension. Self-judgment was also negatively associated with self-compassion but in a lower magnitude, compared to volunteers.

**Table 4.** Pearson product-moment correlations between the study variables in volunteers and non volunteer's subjects.

	Measures	Quality of Life					
		Self-Comp.	Self-Judg.	Psych.	Physic.	Envir.	Social
Quality of Life	Self-Comp.	----	<b>-.57***</b>	<b>.55**</b>	<b>.23***</b>	<b>.27***</b>	<b>.23***</b>
	Self-Judg.	-.22**	----	<b>-.54**</b>	<b>-.26***</b>	<b>-.22***</b>	<b>-.27**</b>
	Psych.	.10	-.21*	----	<b>.53***</b>	<b>.44***</b>	<b>.49***</b>
	Physic.	.02	.02	<b>.66***</b>	----	<b>.49***</b>	<b>.33***</b>
	Envir.	-.13	.03	<b>.53***</b>	<b>.54***</b>	----	<b>.36***</b>
	Social	-.00	-.08	<b>.64***</b>	<b>.47***</b>	<b>.43***</b>	----

Note: in bold are the correlations of the volunteer sample. Self-comp. = Self-compassion; Self-judg. = Self-judgment; Quality of life dimensions (WHOQOL): Psych. = Psychological; Physic = Physical; Envir. = Environmental; \*\*\* p<.001; \*\* p<.01; \* p<.05.

In order to explore the correlation coefficients in volunteering variables, it was examined whether these variables would be significantly correlated with self-compassion and quality of life variables (Table 5).

The results showed a positive and moderate correlation between 'impact on self' and 'impact on others', whereas 'time spent on volunteering' and 'hours doing volunteering' were positively correlated with 'impact on self' and 'impact on others', but not significantly.

In relation to self-compassion, the correlation was positive and low with 'impact on self' and 'impact on others' and self-judgment was negatively correlated with 'impact on others'.

Finally, regarding quality of life, results revealed a positive and low association with 'impact on self' and 'impact on others' variables.

**Table 5.** Correlation coefficients in volunteering variables.

	Impact on Self	Impact on Others	Hours Volunt.	Time Volunt.
Impact on Self	----			
Impact on Others	<b>.68***</b>	----		
Hours Volunt.	.10	.15	----	

<b>Time Volunt.</b>	.16	.13	.15	----
<b>Self-Compassion</b>	.19 <sup>*</sup>	.20 <sup>*</sup>	-.06	.01
<b>Self-Judgment</b>	-.11	-.19 <sup>*</sup>	-.03	.01
<b>Quality of Life</b>				
<b>Psychological</b>	.18 <sup>*</sup>	.24 <sup>**</sup>	-.02	-.02
<b>Physical</b>	.28 <sup>***</sup>	.28 <sup>***</sup>	.06	-.14
<b>Environment</b>	.30 <sup>***</sup>	.27 <sup>**</sup>	.09	.01
<b>Social</b>	.19 <sup>*</sup>	.23 <sup>**</sup>	.06	.07

Hours Volunt. = 'Hours doing Volunteering'; Time Volunt. = 'Time Spent on Volunteering';  
<sup>\*\*\*</sup> p<.001; <sup>\*\*</sup> p<.01; <sup>\*</sup> p<.05.

#### 4. Discussion

As a prolonged compassionate behavior, volunteering has been recently studied as a potential activity related to positive results on psychological well-being in volunteer subjects (Mongrain, et al., 2011; Gillath, et al., 2005). However, emotional regulation strategies involved in the practice of volunteering work were not empirically studied yet. Thus, one of the goals of this research was the study of self-compassion in this specific population and to analyze the differences between the two groups regarding self-compassion and quality of life. Furthermore, this study aimed to characterize the volunteer population and explore the volunteering variables related to quality of life.

The results of this study showed higher levels of self-compassion in volunteer subjects, comparatively to non volunteers. In accordance with other studies (Pavlova & Silbereisen, 2012; Piliavin, 2005; Thotis & Hewitt, 2001, Veerasamy, Sambasivan & Kumar, 2013, 2015), results also showed increased levels in psychological, physical, environmental and social dimensions of quality of life in the volunteer sample, compared to non-volunteers. Additionally to these results, the positive correlation between self-compassion and quality of life dimensions was significantly higher in the volunteer's sample, than on non-volunteers.

Regarding the positive impact of volunteering in other's and in their own lives, results demonstrated a positive and significant correlation with quality of life.

According to these findings, it is possible to admit that an altruistic attitude, which involves the demonstration of interest in others, being helpful, supportive and compassionate of other's suffering as well as their needs, appears to influence the positive impact of volunteer activity on self well-being but also in other's well-being. Consistent with the positive impact perceived on self and on other's lives, results in this study showed that volunteer's motives to engage on volunteering were related to an altruistic reason (72.8% selected "pleasure to take care of other(s) or helping other(s)"). It seems that the positive impact felt by volunteers could be

linked to the sense of belonging and purpose in life explains volunteer's life satisfaction according to Social Interest Theory (Ansbacher, 1991).

Nevertheless, variables related to the time engaged with volunteer activity as well as the hours spent on volunteering work did not have a significant positive correlation. According to these results, on the contrary of other studies (Choi & Kim, 2011; Grant, 2012, Grube & Piliavin, 2000; Musik, Herzog & House, 1999), it was not the frequency of volunteering work that predicted the positive effect on psychological well-being. According to some previous studies (Litwin & Shiovitza-Ezra, 2006; Maierr & Klumb, 2005; McMunn, Nazroo, Wahrendorf, Breese & Zaninotto, 2009) which did not find a positive correlation between the positive well-being in volunteers and the frequency of the activities *per se*, they suggest that positive results can be related to the quality of the context of social relationships and the experienced positive social image of their activity.

In conclusion, it seems that, when individuals feel their volunteer activity has an important role in society as well as their existence and their action is important, not just in their lives but also on other's lives, these positive impact can affect positively the quality of life. More than the time dedicated to the volunteering activity, the sense of purpose and belonging, also the engagement in a meaningful social role, as volunteers, seems to facilitate the social acceptance and have a stronger implication in quality of life.

Additionally, the altruistic behavior of volunteers related to the responsiveness towards others may explain the increased levels of self-compassion. It seems that, when in a state of soothing, feeling safe and contentment, will promote positive interactions that are linked to the activation of self-soothing system. In turn, positive feelings on the mind of others will be created leading to social acceptance (Gilbert, 2005; Baumeister & Leary, 1995) and may explain the higher levels of quality of life.

Taken together, these findings may have an important implication suggesting that practicing a prolonged compassionate behavior, such as volunteering work, can be useful to increase self-compassion levels. Thus, higher levels of self-compassion are related to psychological and physical well-being (Neff, 2003a, 2003b, 2004). Volunteering can be suggested as a form of training an positive attitude promoting a warm and comprehensive self-to-self relationship related to an adaptative affect regulation focused on the development of the soothing system.

However, these results have to be considered taking into account a few limitations. On one hand, some methodological limitations related to the cross-sectional design of this study only allow to interpret in terms of associations, making it difficult to determine causal relationships between variables. Longitudinal studies will be needed to test the benefits of a volunteering activity. On the other hand, the results of this study have to consider the use of self-reported questionnaires which may cause common



variance. Future researchers should consider having objective reports or supervisor reports.

Regarding the sample, the inclusion in this study of women subjects only is still a limitation. However, the volunteer sample included in this study had an interesting wide range of activities which were missing from other studies, as well as younger subjects, since the majority of this studies are essentially focused on older adults.

Nevertheless, this study highlights the importance of volunteering activity in quality of life. Besides, it was also a pioneer in the study of self-compassion as an emotion regulation strategy implicit in quality of life in women volunteering.

## References

- Ansbacher, H. (1991). The concept of social interest. *Journal of Individual Psychology, 47*, 28-46.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529. <http://dx.doi.org/10.1037//0033-2909.117.3.497>
- Bond, J. (2012). Volunteerism and life satisfaction among older adults. *Canadian Journal of Counselling and Psychotherapy/Revue canadienne de counseling et the psychothérapie, 3*, 16.
- Buss, D. (2003). *Evolutionary psychology: The new science of mind* (2<sup>nd</sup> ed.). Boston: Allyn & Bacon.
- Castilho, P., & Pinto-Gouveia, J. (2011). Auto-compaixão: Estudo da validação da versão portuguesa da Escala de Auto-compaixão e da sua relação com as experiências adversas na infância, a comparação social e a psicopatologia [Self-compassion: Validation study of the portuguese version of the self-compassion scale and its association with early adverse experiences, social comparison and psychopathology]. *Psychologica, 54*, 203–229.
- Choi, N., & Kim, J., (2011). The effect of time volunteering and charitable donations in later life on psychological well-being. *Ageing Society, 31*, 590-610. doi:10.1017/S0144686X10001224.
- Ekerdt, D. (1986). The Busy Ethics: Moral Continuity between work and retirement. *Gerontologist, 26*(3), 239-244.
- Gilbert, P. (2005). *Conceptualizations, research and use in psychotherapy*. London: Routledge.
- Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in psychiatric treatment, 15*, 199-208. doi: 10.1192/apt.bp.107.005264
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *The British Psychological Society, 53*, 6-41.
- Gillath, O., Shaver, P., & Mikulincer, M. (2005). An attachment-theoretical approach to compassion and altruism. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (121-147). London: Brunner-Routledge.
- Goetz, J., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin, 136*, 351-374. doi: 10.1037/a0018807.
- Grant, A. (2012). Giving time, Time After Time: Work Design and Sustained Employee Participation in Corporate Volunteering. *Academy of Management Review, 37*(4), 569-585.
- Grube, J., & Piliavin, J. (2000). Role Identity, organizational experiences, and volunteer performance. *Personality and Social Psychology Bulletin, 28*, 1108-1119.
- Krause, N., Herzog, R., & Baker, E. (1992). Providing Support to Others and Well-Being in Later Life. *Journal of Gerontology: Psychological Sciences, 47*(5), 300-311

- Li, K., & Ferraro, K. (2005). Volunteering and depression in later life: social benefits or selection processes?, *Journal of Health and Social Behavior*, 46, 68-84
- Litwin, H., & Shiovitz-Ezra, S. (2006). The association between activity and wellbeing in later life: what really matters? *Ageing & Society*, 26, 225-242.
- Lum, T., & Lightfoot, E. (2005). The effects of volunteering on the physical, and mental health of older people. *Research on Aging*, 27 (1), 31-55.
- Maierr, H., & Klumb, P. (2005). Social participation and survival at older ages: is the effect driven by activity content or context? *European Journal of Aging*, 2, 31-9.
- McMunn, A., Nazroo, J., Wahrendorf, M., Breese, E., & Zaninotto, P. (2009). Participation in socially-productive activities, reciprocity and wellbeing in later life: baseline results in England. *Ageing & Society*, 29, 763-782.
- Mongrain, M., Chin, J., & Shapira, L. (2011). Practicing Compassion Increases Happiness and Self-Esteem. *Journal of Happiness Studies*, 12(6), 963-981, doi: 10.1007/s10902-010-9239-1
- Morrow-Howell, N., Hinterlong J., Rozario P., & Tang, F. (2003). Effects of volunteering on the well-being of older adults. *The Journal of Gerontology Series B*, 58, 137-145.
- Musik, M., Herzog, A., & House, J. (1999). Volunteering and mortality among older adults. Finding from a national sample. *The Journal of Gerontology Series*, 54,173-180.
- Musik, M., & Wilson, J. (2003). Volunteering and Depression: the role of psychological and social resources in different age groups. *Social Sciences & Medicine*, 56, 259-269.
- Neff, K. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85–102. doi: 10.1080/1529886039012986
- Neff, K. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223–250. doi:10.1080/15298860390209035
- Neff, K. (2004). Self-compassion and psychological well-being. *Constructivism in the Human Sciences*, 9, 27–37.
- Neff, K., Rude, S., & Kirkpatrick, K. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, 41, 908-916.
- Omoto, A., & Snyder, M. (1995), Sustained helping without obligation: Motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of Personality and Social Psychology*, 71, 482-499.
- Pavlova M., & Silbereisen, R. (2012). Participation in voluntary organizations and volunteer work as a compensation for the absence of work and partnership? Evidence from two German samples of

- younger and older adults. *The Journal of Gerontology Series B*, 67 (4), 514-524.
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology*, 56, 365-392.
- Piliavin, J. (2005). Feeling good by doing good: Health consequences of social service. In A. Omoto (Ed.), *Processes of community change and social action* (pp.29-50). Mahwah, NJ: Lawrence Erlbaum Associates.
- Piliavin, J., & Siegl, E. (2007). Health benefits of volunteering in the Wisconsin Longitudinal Study. *Journal of Health and Social Behavior*, 48, 450-464.
- Simões, M. R. (1994). Investigações no âmbito da Aferição Nacional do teste das Matrizes Progressivas Coloridas de Raven (M.P.C.R.). [Researches under the National survey on Raven's progressive matrices]. (unpublished doctoral dissertation). Faculty of psychology and education sciences, University of Coimbra, Portugal.
- Su, Y., & Ferraro, K. (1997). Social Relations and Health Assessments among Older People: Do the effects of Integration and Social Contributions Vary Cross-Culturally?, *The Journal of Gerontology Series B*, 42, 115-131.
- Thotis P., & Hewitt, J. (2001). Volunteer work and well-being. *Journal of Health and Social Behavior*, 42, 115-131.
- Vaz-Serra, A., Canavarro, M., Simões, M., Pereira, M., Gameiro, S., Quartilho, M., Paredes, T. (2006). Estudos psicométricos do instrumento de avaliação da qualidade de vida da Organização Mundial de Saúde (WHOQOL-Bref) para português de Portugal [Psychometric studies of the World Health Organization quality of life assessment tool (WHOQOL-Bref) in Portuguese from Portugal]. *Psiquiatria Clínica*, 27(1), 41-49.
- Veerasamy, C., Sambasivan, M., & Kumar, N. (2013). Individual Skills Based Volunteerism and Life Satisfaction among Healthcare Volunteers in Malaysia: Role of Employer Encouragement, Self-Esteem and Job Performance, A Cross-Sectional Study. *PLoS One*, 8(10). E77698. doi:10.1371/journal.pone.0077698.
- Veerasamy, C., Sambasivan, M., & Kumar, N. (2015). Life Satisfaction Among Healthcare Volunteers in Malaysia: Role of Personality Factors, Volunteering Motives, and Spiritual Capital. *Voluntas*. 26, 531-552. doi:10.1007/s11266-014-9437-2
- Van Willigen, M. (2000). Differentia Benefits of Volunteering across the Life Course. *The Journal of Gerontology Series B*, 5, 308-318.
- Wethington, E., Phyllis, M., Glasgow, N., & Pillemer, K. (2000). Multiple Roles, Social Integration and Health. In Pillemer, N., Mewhington, E. & Glasgow N. (Eds), *Social Integration in the Second Half of Life* (48-71). Baltimore, MD: Johns Hopkins University Press.
- Wilson, J. (2000). Volunteering, *Annual Review of Sociology*, 26, 215-240.

- Wilson, J. (2012). Volunteerism research: A review essay. *Nonprofit and Voluntary Sector Quarterly*, 41, 176. doi:10.1177/0899764011434558.
- WHO (1995). Physical status: the use and interpretation of anthropometry. Reports of a WHO Expert Committee. *WHO Technical Report series 854*. Geneva: WorldHealth Organization.
- WHO (1998). Development of World Health Organization WHOQOL-BREF Quality of Life Assessment. *Psychological Medicine*, 28, 551-558.

## Does Volunteering activity moderate the impact of shame on psychopathological symptoms?

### Abstract

Several studies have highlighted volunteering as an activity linked to positive indicators of mental health. This study aims to clarify the benefits associated with volunteering activity on mental health, and test the moderator effect of volunteering on the impact of external shame on psychopathological symptoms (depression and anxiety symptoms).

In the present study, participants were divided into two independent groups, women volunteers ( $N = 151$ ) and women non-volunteers ( $N = 150$ ), aged from 18 to 60 years old. Self-report measures were administered to assess external shame (OAS), submissive behavior (SBS) and psychopathological symptoms (DASS-21).

Data showed that volunteering women presented significantly lower levels of external shame, submissive behavior, depression and anxiety symptoms, when compared to non-volunteering women. Furthermore, results showed a moderating effect of volunteering activity on the relationship between external shame and psychopathological symptoms (depression and anxiety symptoms). In fact, for the same level of external shame, women who are doing a volunteering activity present lower anxiety and depression symptoms.

This study was the first one to explore the relationship of volunteering activity with external shame, underlining the importance of volunteering on women's mental health.

**Key Words:** volunteering, external shame, depression, anxiety, submissive behavior, moderator analysis

## Terá o voluntariado um papel moderador no impacto que a vergonha externa exerce sobre os sintomas psicopatológicos?

### Resumo

Vários estudos têm referenciado o voluntariado como sendo uma atividade associada a indicadores positivos de saúde mental. Este estudo tem como objetivo clarificar os benefícios associados à atividade de voluntariado na saúde mental e testar o efeito moderador do voluntariado no impacto que a vergonha externa exerce sobre os sintomas psicopatológicos (depressão e ansiedade).

No presente estudo os participantes foram divididos em dois grupos independentes compreendendo mulheres que desempenham atividades de voluntariado ( $N = 151$ ) e mulheres que não realizam atividades de voluntariado ( $N = 150$ ), com idades entre os 18 e 60 anos. Um conjunto de medidas de autorresposta foi implementado com o intuito de avaliar a vergonha externa (OAS), comportamentos submissivos (SBS) e sintomas psicopatológicos (depressão, ansiedade e stress – DASS21).

Os resultados indicam que mulheres voluntárias apresentam níveis significativamente menores em relação à vergonha externa, comportamento submissivo, depressão e ansiedade comparativamente a mulheres não voluntárias. Para além dos resultados mencionados, verifica-se um efeito moderador da atividade de voluntariado na relação entre vergonha externa e sintomas psicopatológicos (depressão e ansiedade). De facto, é possível observar que, para os mesmos níveis de vergonha externa, mulheres que desempenham uma atividade de voluntariado apresentam menores níveis de ansiedade e depressão.

Este estudo preza-se por ser o primeiro a explorar a relação entre a atividade de voluntariado e a vergonha externa e reforça a importância que o papel do voluntariado tem na saúde mental das mulheres.

**Palavras Chave:** voluntariado, vergonha externa, depressão, ansiedade, comportamento submissivo, análise de moderação

## 1. Introduction

Volunteering, is considered a specific type of prosocial behavior that usually takes place in organizational settings (Grant, 2012). In the last decades, volunteering activity has motivated the interest of researchers, due to its association with one's satisfaction with life and mental health (Grant, 2012; Li & Ferraro, 2005; Pavlova & Silbereisen, 2012; Piliavin & Siegl, 2007; Thotis & Hewitt, 2001; Veerasamy, Sambasivan & Kumar, 2013, 2015).

Several studies have shown the healthy benefits of volunteering activity on psychological well-being, on subjects who are currently doing volunteering work (Li & Ferraro, 2005; Musik & Wilson, 2003; United Health Group, Wilson, 2012). In a recent study, volunteers of the United Health Group (2013) revealed that volunteering work made them feel healthier and 78% reported that volunteering reduced their levels of stress (UnitedHealth Group, 2003). Additionally, Wilson (2012) found that volunteering can improve problem-solving skills and increase health indicators of volunteers by reducing their stress levels. Consistent evidence also suggests that volunteering has beneficial effects in relation to depression levels (Piliavin, 2005; Van Willingen, 2000), strengthened by longitudinal studies (Li & Ferraro, 2005; Musik & Wilson, 2003). In fact, and in accordance to Li and Ferraro (2005), in a longitudinal study of eight years concluded that “volunteerism is a long-term antidote to depressive episodes” (p.79).

In this context, the evolutionary approaches may provide a better understanding of volunteering, especially regarding its association with life satisfaction and positive indicators of mental health. In line with this perspective, human beings are motivated to reach certain biosocial goals which are essential to ensure the fulfilling of survival needs, such as be accepted and valued by the social group (Buss, 2003; Gilbert, 2000, 2005, 2009, 2014). According to Gilbert's evolutionary model, there are three affect regulation systems: threat-protection, drive-resource seeking and safeness-soothing (Gilbert, 2000, 2005, 2009). The first one, the threat system, enables certain emotions when activated (e.g., fear, anger, disgust, anxiety and shame). These emotions direct attention to threat-signals and prepare individuals to a faster activation of defensive responses (Castilho & Pinto-Gouveia, 2011). Secondly, drive system is motivated by feelings of pleasure and excitement, directing individuals to seek and acquire resources (Buss, 2003; Gilbert, 2005). This system is also involved with the competitive drive and seeks to have a favorable position in social groups as a way to avoid rejection and criticism (Gilbert, 2000; 2005; 2009). When drive-system is over-stimulated, an overreliance on achievement can increase the likelihood to create states of depression (Taylor, Gooding, Wood & TARRIER, 2011). Finally, the safeness/soothing system is a specific positive affect system, linked to states of soothing, contentment and feeling safe (Gilbert, 2000, 2005, 2009). This system can balance the activation of the two other emotion-systems, and individuals are more aware to social



signals of affiliation and motivated to approach others (Buss, 2003). So, when an individual is motivated to have positive social interactions, it will promote positive feelings as well as less driven and threatened emotions (Gilbert, 2014).

According to this three motivation system, individuals are moved towards important life goals. When such effort is denied, individuals may experience the social signals as threats (Gilbert, 2005). Therefore, the threat-system will be activated and individuals may experiment threat-related emotions, such as external shame, and could adopt a submissive behavior. The experience of 'self' as inferior, powerless, inadequate, and rejectable, is related to the threat-related emotion of shame (Tangney & Dearing, 2002). According to Lewis (1992, 2003), shame can be considered an socially-focused emotion, linked to the fear of rejection and to a perceived inferior social rank position. Specifically, when related to thoughts and feelings regarding a negative existence of the self in the minds of others, it is called external shame (Gilbert, 1998).

Submissive behavior is also associated with the perception of an inferior social rank position, and can be a form of a social defense (Gilbert, 1993). Such defensive behavior is characterized by an escape/avoidance or passive inhibition response (Allan & Gilbert, 1997). In this context, shame is known to be responsible to motivate such behaviors (Lewis, 1992). In fact, research has show that both external shame and submissive behavior are associated with a negative social comparison, and self-perceptions of inferiority which are, in turn, related to psychopathology (Allan & Gilbert, 1997; Allan, Gilbert & Goss, 1994; Matos, Pinto-Gouveia, & Gilbert, 2012; Matos, Pinto-Gouveia & Duarte, 2012; Matos & Pinto-Gouveia & Costa, 2011; Gilbert & Procter, 2006).

Nevertheless, volunteering is a prosocial behavior and has been designed as a compassionate action (Mongrain, Chin & Shapira, 2011; Gillath, Shaver & Mikulincer, 2005) which may provide an attractive and helpful image of the self to others, promoting a valued sense of self and desire to approach to others, linked to the activation of the safeness-soothing system. Thus, when an individual is in a soothing state, positive feelings will be promoted (e.g., affiliation, connectedness and safeness) and individuals will be less focused on threat-stimulus (Gilbert, 2000, 2005, 2009, 2014). Hence, the current study aims to explore the benefits associated to volunteering activity, and analyze the differences between volunteers and non-volunteers regarding external shame, submissive behavior and psychopathological symptoms (specifically depressive, anxious and stress symptomatology). It is hypothesized that subjects who are currently doing volunteering work will experiment lower levels of external shame, submissive behavior and depression, anxiety and stress symptoms, comparing to non-volunteers. In addition, the main goal of this study was to explore the moderate effect of volunteering activity on the association between external shame and psychopathological symptoms (depression and anxiety symptoms). It is expected that volunteering activity would buffer the

impact of external shame on psychopathological symptoms.

## 2. Material and Methods

### 2.1. Participants

Two samples were included in this research; 151 (50.2%) women who were currently doing volunteering work and 150 (49.8%) women who were not doing volunteering work at the time.

Participants presented ages between 18 and 60 years old: volunteers sample presented a mean age of 30.50 ( $SD = 11.36$ ) and non-volunteers a mean age of 28.85 ( $SD = 11.44$ ). No differences were found between the two samples regarding age ( $t_{(299)} = -1.255$ ;  $p = .210$ ). In relation to years of education, results showed a significantly higher level of education in the volunteer sample ( $M = 15.11$ ;  $SD = 2.79$ ), when compared to non-volunteers ( $M = 14.13$ ;  $SD = 2.61$ ) ( $t_{(299)} = -3.14$ ;  $p = .002$ ).

### 2.2. Measures

*Demographic Data.* Before the completion of the self-report measures, participants were asked to report their age and educational level.

*Depression, Anxiety and Stress Scale.* (DASS-21; Lovibond & Lovibond, 1995; Portuguese version by Apóstolo, Mendes & Azeredo, 2006). DASS-21 is a short version of a self-report measure of DASS-42 (Lovibond & Lovibond, 1995) composed with 21 items and designed to assess three dimensions: depression (Dep), anxiety (Anx) and stress (Str). The items indicate negative emotional symptoms and are rated on a four-point Likert severity scale (0-never to 3-almost always). On the original version, the subscales presented high internal consistency ( $\alpha = .91$ ;  $\alpha = .84$ ;  $\alpha = .90$ , in Depression, Anxiety and Stress subscales, respectively) and in Portuguese validation version (Dep  $\alpha = .85$ ; Anx  $\alpha = .74$ ; Str  $\alpha = .81$ ). In the current study, the Chronbach's alpha coefficients for depression were .86, in both samples, anxiety were .81 and .88 and stress were .90 and .92, respectively to volunteer and non volunteers.

*Other as Shamer Scale.* (OAS; Goss, Gilbert, & Allan, 1994; Portuguese version by Matos, Pinto-Gouveia, & Duarte, 2011). The OAS is an instrument that measures external shame and is composed by 18 items that evaluates the frequency (0-never to 4-almost always) of feelings or experiences about how others negatively judge the self (e.g., *Others see me as fragile*). Cronbach's alpha values were higher in the original study (.92) and in the Portuguese validation study (.91). The internal consistency in this study was also good in both samples ( $\alpha = .93$  volunteers and non-volunteers sample).

*Submissive Behavior Scale.* (SBS; Allan and Gilbert 1997; Portuguese version by Freitas, P., 2011). The SBS contains 16 examples of submissive behaviors (e.g. *I agree that I am wrong even though I know I'm not*), rated for frequency, from 0 (*Never*) to 4 (*Always*). The scale has good consistency on the original version (.89) and Portuguese validation study (.87) as well as in this study (volunteers  $\alpha = .83$ ; non volunteers  $\alpha = .84$ ).

### 2.3. Procedure

The current study is part of a wider research that explores the different emotional regulation strategies involved in mental health and quality of life, on women.

The present research protocol was approved by the Ethics Committees of the institutions enrolled in this study. The volunteer sample was recruited through an initial contact with different volunteering institutions, while non-volunteer participants were recruited from the general population as a convenience sample. Firstly, all participants were informed about the confidential character, objectives and procedures of the research. Then, subjects who agreed to participate in the research gave their written informed consent, before completing the self-measures.

Considering the goal of this study, the data were cleaned in order to exclude male subjects and also subjects who failed to fill within the considered age interval (18-60 years). Moreover, all participants that did not complete all the questionnaire's items were excluded.

### 2.4. Analytic strategy

The data analysis was performed using SPSS 22 (IBM Corp, 2014).

At the first moment, descriptive statistics were conducted to study the mean, standard deviations of study variables in both groups. T-tests for two independent samples were performed to test the differences in the study variables between the groups (volunteers and non-volunteers). Bivariate statistics using Product-moment Pearson correlation analysis was conducted to understand the relationships between external shame, submissive behavior depression, anxiety, and stress symptoms, in volunteering and non-volunteering groups.

Then, a series of hierarchical multiple regression analyses were performed in order to analyse the moderating effect of volunteering activity.

Firstly, because the moderator variable is categorical, a *dummy* variable was created ( $k - 1$ ) for the volunteering activity (non-volunteering – *dummy* 1 and volunteering – *dummy* 2). Secondly, attempting to reduce the error related to multicollinearity, a standardized procedure was conducted, and the values of the predictor (OAS) and of the moderator (*dummy* 2 - volunteering activity) were centered (Cohen, Cohen, West & Aiken, 2003). Lastly, the interaction product was created by multiplying the previously centered variables: the *dummy* variable, related to volunteering, and the external shame variable (OAS); (Aiken & West, 1991).

Finally, a series of hierarchical multiple regression analyses were performed in order to analyse the moderator effects of volunteering activity (*dummy* 2) in two different models: first model, on the relationship between external shame (OAS) and depression (DASS-DEP), and a second model, on the relationship between external shame (OAS) and anxiety (DASS-ANX). In addition, with the purpose of a better understanding of the moderator effect of volunteering on the relationship between external shame (OAS) and psychopathological symptoms (depressive and anxious symptomatology),

two graphs were plotted considering volunteering and non volunteering.

### 3. Results

#### 3.1. Preliminary data analyses

The suitability of the current data for regression analyses was confirmed. The analysis of residual scatter plots was conducted providing a test of the assumptions of normality, linearity and homoscedasticity between dependent variable scores and errors of prediction. Results showed that the residuals were normally distributed, had linearity and homoscedasticity. Besides, the independence of the errors was analyzed and validated through the value of Durbin–Watson. There was no evidence of the presence of multicollinearity or singularity among the variables, since Variance Inflation Factor values ( $VIF < 5$ ) indicated the absence of  $\beta$  estimation problems.

#### 3.2. Comparisons Between Groups

To explore differences between the two groups in the variables studied, means and standard deviations were explored (Table 1).

Regarding external shame and submissive behavior, results found significant differences. Volunteer subjects presented lower levels of external shame and submissive behavior than non volunteers.

Furthermore, significant differences were found between the two groups on depressive and anxious symptomatology. Volunteers presented lower levels of depression and anxiety symptoms compared to non-volunteers. In relation to stress symptomatology, no significant differences between the two samples were found.

**Table 1.** Means and standard deviation between volunteers and non-volunteers regarding external shame, submissive behavior, depression, anxiety and stress symptoms.

	Volunteers ( <i>N</i> = 151)		Non volunteers ( <i>N</i> = 150)		<i>F</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<b>External Shame (OAS)</b>	16.68	9.95	20.87	11.12	3.425	.001
<b>Submissive Beh. (SBS)</b>	18.43	7.86	21.07	7.97	2.562	.011
<b>Depression (DEP)</b>	2.65	3.24	4.08	4.20	3.293	.001
<b>Anxiety (ANX)</b>	2.05	2.79	3.22	3.90	2.979	.003
<b>Stress (STR)</b>	5.44	4.36	6.23	4.64	1.51	.130

Submissive Beh, = Submissive Behavior

#### 3.3. Correlations

Pearson product-moment correlations between the two groups, regarding external shame, submissive behavior and psychopathological symptoms (depression, anxiety and stress symptoms) are presented in Table 2.

Results in the volunteer sample showed that depression, anxiety and stress symptoms were positively, although weakly, associated to external

shame and submissive behavior. Stress symptoms and submissive behavior did not presented significant correlations in this sample.

In the non-volunteer sample, results revealed a positive and moderate association between external shame and depression, anxiety and stress symptoms. Also, those psychopathological symptoms were found to be positively associated with submissive behavior, however with low magnitudes.

**Table 2.** Pearson product-moment correlations between external shame, submissive behavior, depression, anxiety and stress symptoms in volunteers and non-volunteers sample.

Measures	OAS	SBS	DEP	ANX	STR
<b>OAS</b>	----	<b>.35***</b>	<b>.45***</b>	<b>.38***</b>	<b>.36***</b>
<b>SBS</b>	.49***	----	<b>.21**</b>	<b>.30***</b>	<b>.15</b>
<b>DEP</b>	.62***	.35***	----	<b>.72**</b>	<b>.70***</b>
<b>ANX</b>	.53***	.37***	.72**	----	<b>.68***</b>
<b>STR</b>	.53***	.34***	.74***	.80***	----

Note: in bold are the correlations of the volunteer sample; OAS: Others As Shamer; SBS: Submissive Behavior Scale; DEP: Depression DASS-21; ANX: Anxiety DASS-21; STR: Stress DASS-21; \*\*\* $p < .001$ ; \*\* $p < .01$

### 3.5. Hierarchical Multiple Regression

To further understand the role of volunteering activity on the relationship between external shame and depressive symptomatology and between external shame and anxious symptomatology, a series of multiple hierarchical regression analysis were conducted, predicting the severity of psychopathological symptoms (Depression and Anxiety Subscale of DASS-21), from external shame (OAS) and volunteering activity (VOLUN).

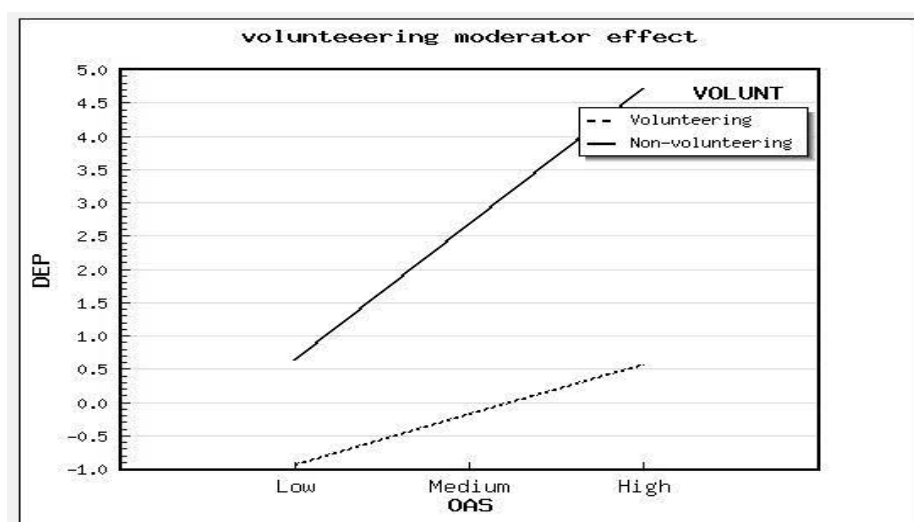
#### 3.5.1. The moderator effect of volunteering activity on the relationship between external shame and depressive symptomatology

Firstly, the moderator Model 1 was examined, having volunteering activity as a moderator on the relationship between external shame and depressive symptomatology (Table 3).

The procedure was the following: in the first step, external shame (OAS) entered as a predictor; in step two, volunteering (VOLUNT) was also integrated as a predictor variable; the third step, the interaction between the two predictors was included. Statistically significant models were produced, as the predictors were entered in both steps 1 and 2 [Step 1:  $R^2 = .32$ ,  $F_{(1,296)} = 139.74$ ,  $p < .001$ ; Step 2:  $R^2 = .33$ ,  $F_{(1,295)} = 71.50$ ,  $p < .001$ ]. In the third step, the interaction between the predictors obtained a  $R^2$  of .34 [ $F_{(1,294)} = 50.81$ ,  $p < .001$ ]. The interaction between the two predictors is also statistically significant, pointing out a moderator effect of volunteering activity on the association between external shame and depressive symptomatology ( $\beta = -.12$ ;  $t_{(3)} = -2.59$ ;  $p = .010$ ).

In order to acquire a better understanding of the relationship between external shame and depressive symptomatology, considering volunteering activity as a moderator, a graphic representation was plotted (figure 1)

The graphic representation regarding depressive symptomatology allowed to verify that, for the same levels of external shame, women who are currently doing volunteering work presented lower depressive severity symptomatology, than women who are not in a volunteering activity. It was interesting to note that even when volunteer women presented the same high levels of external shame as non-volunteer women, the highest levels of depressive symptomatology experienced by volunteer women was lower than the lowest levels of depression symptoms experienced by non-volunteer women (Figure 1).

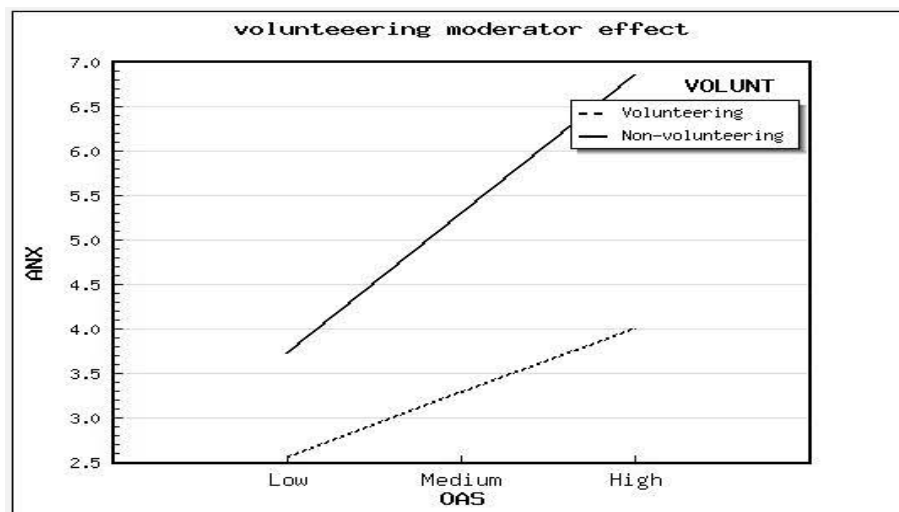


**Figure 1.** Graphic for the relation between external shame (OAS) and depressive symptomatology (DEP-DASS) with volunteering activity (VOLUNT) as a moderator.

### 3.5.1. The moderator effect of volunteering activity on the relationship between external shame and anxious symptomatology

A second model (model 2) was tested to predict anxious symptomatology (Table 3). The same procedure was conducted: in the first two steps the predictors (external shame – OAS and volunteering activity - VOLUNT) produced a statistically significant model [Step 1:  $R^2 = .24$ ,  $F_{(1,296)} = 91.24$ ,  $p < .001$ ; Step 2:  $R^2 = .24$ ,  $F_{(1,295)} = 46.81$ ,  $p < .001$ ]. The interaction with those two predictors, in step 3, revealed a statistically significant model, and obtained a  $R^2$  of .26 [ $F_{(1,294)} = 33.60$ ,  $p < .001$ ], also the interaction was significant [ $\beta = -.12$ ;  $t_{(3)} = -2.39$ ;  $p = .018$ ], and confirmed the moderator effect of volunteering on the relationship between external shame and anxious symptomatology.

The moderator effect of volunteering on the relationship between external shame and anxiety symptoms could be seen through a graphic representation (Figure 2). In fact, women who are currently doing volunteering work presented lower anxiety symptoms for the same levels of external shame, than women who are not in a volunteering activity. This result allows to confirm a buffering effect of volunteering activity against the impact of external shame on anxious symptomatology (Figure 2).



**Figure 2:** Graphic for the relation between external shame (OAS) and anxiety symptoms (DASS-ANX) with volunteering activity (VOLUNT) as a moderator.

**Table 3.** Hierarchical multiple regression for two different models: Model 1: volunteering activity (VOLUNT) as a moderator on the relationship between external shame (OAS) and depressive symptomatology (DEP-DASS) ( $N = 301$ ); Model 2: volunteering activity (VOLUNT) as a moderator on the relationship between external shame (OAS) and anxious symptomatology (ANX-DASS) ( $N = 301$ ).

Predictor	Model 1. Depressive Symptomatology ( $N=301$ )		Model 2. Anxious Symptomatology ( $N=301$ )	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
<b>Step 1</b>	.32		.24	
OAS		.57***		.49***
<b>Step 2</b>	.01		.01	
OAS		.55***		.47***
VOLUNT		-.08		-.07
<b>Step 3</b>	.02		.01	
OAS		.54***		.46***

VOLUNT	-.08	-.08
OASxVOLUNT	-.12*	-.12**
<b>Total R<sup>2</sup></b>	.34	.26

\*p < .05; \*\*p<.01, \*\*\*p < .0

#### 4. Discussion

Volunteering activity has been designated as a compassionate action (Mongrain, Chin & Shapira, 2011; Gillath, Shaver & Mikulincer, 2005) linked to well-being indicators of mental health. In fact, this activity seems to generate positive affect and a sense of safeness, which in accordance to evolutionary approach may be related to the activation of safeness-soothing system and deactivation of drive and threat systems.

External shame, on the contrary, is associated with psychopathological indices, such as depression and anxiety symptoms (Matos, Pinto-Gouveia, & Gilbert, 2013; Matos, Pinto-Gouveia & Duarte, 2012; Gilbert, 2000). In this line, the main goal of this study was to explore whether volunteering activity can buffer the impact of external shame on depression and anxiety symptoms. Thus, the current study expected a moderator role of volunteering work on the relationship between external shame and psychopathological symptoms.

In fact, the current study's results showed significant differences between the two groups regarding external shame, submissive behavior and psychopathological symptoms. Volunteers presented lower levels of external shame, submissive behaviors, depression and anxiety symptoms, comparatively to non-volunteers. These results are in accordance with the literature and corroborate hypothesis of this study, underlining volunteering as a positive activity, given the lower levels of psychopathological symptoms presented by volunteers (Li & Ferraro, 2005; Musik & Wilson, 2003; Piliavin, 2005; Van Willingen, 2000; Veerasamy, Sambasivan & Kumar, 2013, 2015; Wilson, 2012). Also, as expected and in accordance to previous studies (Matos, Pinto-Gouveia, & Gilbert, 2013; Matos, Pinto-Gouveia & Duarte, 2012; Goss, Gilbert & Allan, 1994), external shame and submissive behavior are significantly linked to psychopathological symptoms in both groups.

Furthermore, the present study revealed a moderator effect of volunteering activity on the relationship between external shame and depression symptoms as well as on the relationship between external shame and anxiety symptoms. These results add significant data to literature, verifying the buffer effect of volunteering activity on the association between external shame and psychopathological symptoms. In fact, for the same levels of external shame, women who are currently doing volunteering work presented lower depressive and anxious symptomatology, comparing to women who are not in a volunteering activity. So, this findings suggest that volunteering activity, as a part of a person's life conduct, can be a positive indicator of mental health, since volunteering may moderate the impact of external shame on psychopathological symptoms.



Nevertheless, these findings should be considered taking into account some methodological limitations. The transversal design of the current study limits causal conclusions and the use of self-reported questionnaires does not give a concise measure. Further investigation should be aware and consider having objective reports or supervisors, such as personal structured interviews.

Regarding the sample, the exclusive inclusion of women is a limitation that should be considered and overcome on further investigations. Nonetheless, considering the authors' knowledge, this was the first study in Portugal which studied the mental health of this specific population.

Taking this findings together, this study highlights the benefits associated to a compassionate behavior and represented the first study to explore the moderator role of volunteering activity on the relationship between external shame and psychopathological symptoms. Therefore, the presented results could have a relevant impact on community implications. As shown by other studies (Matos, Pinto-Gouveia & Gilbert, 2013; Matos, Pinto-Gouveia & Duarte, 2012; Goss, Gilbert & Allan, 1994), external shame is a significant predictor of psychopathological symptoms since its link with the stimulation of the threat system and prevention of the development of the safeness-soothing system. Also, the experience of shame may over activate the drive system in order to regulate threat and deal with negative feelings related to an unattractive social image. In this case, the development and activation of safeness-soothing through the practice of a prolonged compassionate behavior may enable adaptive affect regulation.

## References

- Aiken, L., & West, S. (1991) *Multiple regression: Testing and interpreting interactions*. Newbury Park, London, Sage.
- Allan, S., & Gilbert, P. (1997). Submissive Behavior and Psychopathology. *British Journal of Clinical Psychology*, 36, 467-488.
- Allan, S., Gilbert, P. & Goss, K. (1994). An exploration of shame measures: II: Psychopathology. *Personality and Individual Differences*, 17, 19-722.
- Buss, D. (2003). *Evolutionary psychology: The new science of mind* (2<sup>nd</sup> ed.). Boston: Allyn & Bacon.
- Cohen J., Cohen P., West S., & Aiken, L. (2003) *Applied multiple regression/correlation analysis for the behavioural sciences*, 3rd edn. New Jersey, Lawrence Erlbaum Associates
- Gilbert, P (1993). Defense and safety: Their function in social behaviour and psychopathology. *British Journal of Clinical Psychology*, 32, 131-154.
- Gilbert, P. (1998). What is shame? Some core issues and controversies. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behaviour, psychopathology and culture* (3-36). New York: Oxford University Press.
- Gilbert, P. (2000). The relationship of shame, social anxiety and depression: The role of the evaluation of social rank. *Clinical Psychology and Psychotherapy*, 7, 174-189. doi:10.1002/1099-0879(200007)
- Gilbert, P. (2009). *The compassionate mind: A new approach to life's challenges*. London: Constable-Robinson.
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *The British Psychological Society*, 53, 6-41.
- Gilbert, P., Allan, S., & Price, J. (1997). Social comparison, social attractiveness and evolution: How might they e related? *New Ideas in Psychology*, 13, 149-165. doi:10.1016/0732-118X(95)00002-X.
- Gilbert, P., & Procter, S. (2006). Compassionate Mind Training for People with High Shame and Self-Criticism: Overview and Pilot Study of a Group Therapy Approach. *Clinical Psychology and Psychotherapy*, 13, 353-37
- Gillath, O., Shaver, P. R., & Mikulincer, M. (2005). An attachment-theoretical approach to compassion and altruism. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (121-147). London: Brunner-Routledge. Gilbert, P. (2005). *Conceptualizations, research and use in psychotherapy*. London: Routledge.
- Grant, A. (2012). Giving time, Time After Time: Work Design and Sustained Employee Participation in Corporate Volunteering. *Academy of Management Review*, 37(4), 569-585.
- Goss, K., Gilbert, P., & Allan, S. (1994). An exploration of shame measures I: The 'Other As Shameer scale'. *Personality and Individual Differences*, 17, 713-717.

- Lewis M (1992). *Shame: The Exposed Self*. New York: The Free Press.
- Lewis M (2003). The role of the self in shame Social Research. *An International Quarterly of the Social Sciences*, 70, 1181-1204.
- Li, K., & Ferraro, K. (2005). Volunteering and depression in later life: social benefits or selection processes?, *Journal of Health and Social Behavior*, 46:68-84
- Lovibond, P., & Lovibond, S. (1995). The structure of negative emotional states: comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33, 335-343.
- Lovibond, S., & Lovibond, P. (1995). *Manual for the Depression Anxiety Stress Scales (DASS)*. New South Wales: Psychology Foundation Monograph.
- Matos, M., Pinto-Gouveia J., & Duarte, C. (2011). *Other as shamer: Versão portuguesa e propriedades psicométricas de uma medida de vergonha externa* [Other as shamer: Portuguese version and psychometric properties of a measure of external shame]. Manuscript submitted for publication.
- Matos, M., Pinto-Gouveia, J., & Duarte, C. (2012). Above and beyond emotional valence: The unique contribution of central and traumatic shame memories to psychopathology vulnerability. *Memory*, 20, 5, 461-477.
- Matos, M., Pinto-Gouveia, J., & Gilbert, P. (2012). The effect of shame and shame memories on paranoid ideation and social anxiety. *Clinical Psychology and Psychotherapy*, 20, 334-349. doi: 10.1002/cpp.1766
- Matos, M., Pinto-Gouveia, J., & Costa, V. (2011). Understanding the importance of attachment in shame traumatic memory relation to depression: The impact of emotion regulation processes. *Clinical Psychology and Psychotherapy*, 20, 149-165. doi: 10.1002/cpp.786.
- Mongrain, M., Chin, J., & Shapira, L. (2011). Practicing Compassion Increases Happiness and Self-Esteem. *Journal of Happiness Studies*, 12(6), 963-981, doi: 10.1007/s10902-010-9239-1
- Musik, M., & Wilson, J. (2003). Volunteering and Depression: the role of psychological and social resources in different age groups. *Social Sciences & Medicine*, 56, 259-269.
- Pavlova M., & Silbereisen, R. (2012). Participation in voluntary organizations and volunteer work as a compensation for the absence of work and partnership? Evidence from two German samples of younger and older adults. *The Journal of Gerontology Series B*, 67 (4), 514-524.
- Piliavin, J. (2005). Feeling good by doing good: Health consequences of social service. In A.Omoto (Ed.), *Processes of community change and social action* (29-50). Mahwah, NJ: Lawrence Erlbaum Associates.

- Piliavin, J., & Siegl, E. (2007). Health benefits of volunteering in the Wisconsin Longitudinal Study. *Journal of Health and Social Behavior*, 48, 450-464.
- Tangney J., & Dearing R. (2002). *Shame and Guilt*. New York, Guilford Press.
- Taylor, P., Gooding, P., Wood, A., & Tarrier, N. (2011). The role of defeat and entrapment in depression, anxiety and suicide. *Psychological Bulletin*, 42, 3-48.
- Thotis P., & Hewitt, J. (2001). Volunteer work and well-being. *Journal of Health and Social Behavior*, 42, 115-131.
- United Health Group & Optum Institute (2013). Doing Good is Good for You: 2013 Health and Volunteering Study. *United Health Group*. Retrieved from <http://www.unitedhealthgroup.com/~media/UHG/PDF/2013/UNH-Health-Volunteering-Study.ashx>
- Van Willigen, M. (2000). Differentia Benefits of Volunteering across the Life Course. *The Journal of Gerontology Series B*, 5, 308-318
- Veerasamy, C., Sambasivan, M., & Kumar, N. (2015). Life Satisfaction Among Healthcare Volunteers in Malaysia: Role of Personality Factors, Volunteering Motives, and Spiritual Capital. *Voluntas*. 26, 531-552. doi:10.1007/s11266-014-9437-2
- Veerasamy, C., Sambasivan, M., & Kumar, N. (2013). Individual Skills Based Volunteerism and Life Satisfaction among Healthcare Volunteers in Malaysia: Role of Employer Encouragement, Self-Esteem and Job Performance, A Cross-Sectional Study. *PLoS One*, 8(10). E77698. doi:10.1371/journal.pone.0077698..
- Wilson, J. (2012). Volunteerism research: A review essay. *Nonprofit and Voluntary Sector Quarterly*, 41, 176. doi:10.1177/0899764011434558.