PSYCHOSOCIAL FACTORS ASSOCIATED WITH PERCEIVED SOCIAL SUPPORT IN BRAZILIAN OLDER PEOPLE

Ana Luísa Patrão[1]
Institute of Collective Health, Federal University of Bahia, Brazil

Vicente Paulo Alves
Tiago Sousa Neiva
Graduate Program in Gerontology, Catholic University of Brasília, Brazil

Abstract
The social support has been reported as playing an important role in the older people life due to its protection effect for health in this specific people. This paper aims to identify psychosocial predictors for perceived social support in Brazilian older people. The sample is constituted by 144 patients (*M* age=69.3; *SD*=6.61). The data were collected through a questionnaire that included sociodemographic questions and scales for psychological variables (e.g. self-efficacy) studied. Lower age, higher level of education, being married or living in a stable union, low levels or absence of depression and high levels of self-efficacy are significant predictors of perceived social support in older people who were studied. Future interventions in older people health promotion context may consider these determinants.

Keywords
perceived social support, psychosocial factors, older people.

Resumo
O suporte social tem sido referido como de central importância na vida dos idosos devido ao seu efeito protetor para a saúde. Este artigo objetiva identificar os preditores psicossociais para o suporte social percebido em idosos brasileiros. A amostra é constituída por 144 idosos pacientes (*M* idade=69.3; *DP*=6.61). Os dados foram colhidos através de um questionário que incluiu questões sociodemográficas e escalas para as dimensões psicológicas do estudo (eg. auto-eficácia). Menor idade, maior nível de educação, ser casado ou viver unido, baixos níveis e ausência de depressão e elevados níveis de auto-eficácia são preditores significativos do suporte social percebido nos idosos estudados. Futuras intervenções no âmbito da promoção da saúde dos idosos devem atender a estes determinantes.

Palavras-Chave
suporte social, preditores psicossociais, idosos.

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[1] Correspondance about this article should be addressed to Ana Luísa Patrão. E-mail address: luisa.patrao@ufba.br

FACTORES PSICOSOCIALES ASOCIADOS CON EL APOYO SOCIAL PERCIBIDO EN
LAS PERSONAS MAYORES DE BRASIL

The social support has been defined in different ways by different authors. For instance, Ricks (19840) proposed a vision that integrates three categories: a descriptive definition that encompasses a feeling of belonging (spouse, family, friends, social groups, organizations); one description characterized by interaction in social networks (meetings, actions of specific support), and a definition based on the satisfaction with the received support (having someone to rely on, etc.). Mitchell and Trickett (1980) proposed five ways of social support: emotional (to be loved, to feel confident, to have intimacy), instrumental (practical material or financial help), normative (acknowledgement, reinforcement of the social identity, feeling of belonging), informational (reference council, cognitive analysis of a situation), and of socialization (access to new contacts, leisure activities, distraction). According to the social provisions model by Weiss (1974), there are six different social functions, which come up with the relationship with other people, allowing to perceive the process by which the interpersonal relationships potentialize the well-being in stressful situations. These are divided in two distinct categories: assistance functions and non-assistance functions. The first ones are related to problem-solving in stress circumstances and are based on (1) orientation (advice or information) and in (2) trustful relationships. The second ones, the non-assistance functions, are evaluated through cognitive processes. These consist in (1) acknowledgement, (2) opportunities to be a caregiver (feeling that the other people rely on us to receive love), (3) linking (emotional proximity from which comes the feeling of safety) and (4) social integration (feeling of belonging to group that share interests).

Independently of its exact definition, social support has been reported as playing a central important role in the older people life due to its protective effect on the physical and mental health of this specific population. Several studies have showed that social support is associated with a variety of health issues among elderly, such as sensorial and autonomy abilities (Unalan, Gocer, Basturk, Baydur, & Ozturk, 2015), cognitive function (Yeh & Liu, 2003), functional capacity for the daily life activities (Brito & Pavarini, 2012), number of hospitalizations and deaths after them (Drame et al., 2013), pacemaker acceptance and life quality in cardiac patients (Bardi, Lorenzoni, & Gregori, 2016), health status self-perception (White, Philogene, Fine, & Sarbajit, 2009), and longevity (Feng, Jones, & Wang, 2015; Lyyra & Heikkinen, 2006).

The perceived social support is related to other psychological dimensions like depression (Kuhirunyaratn, Pongpanich, Somrongthong, Love, & Chapman, 2007; Melchiorre et al., 2013; Olagunju, Olutoki, Ogunnubi, & Adeyemi, 2015) and self-efficacy (Karademas, 2006; Wang, Qu, & Xu, 2016; Warner, Ziegelmann, Schüz, Wurm, & Schwarzer, 2011), as well as to social dimensions, like the number of close friends and the integration level in community organizations (Kuhirunyaratn et al., 2007). In terms of sociodemographic and marital dimensions, there is a strong association between social support and lower age (Bowling, 2011; Segrin, 2003), the presence of the spouse (Feng, Jones, & Wang, 2015), as well as a higher educational level (Barrett, 1999; Kuhirunyaratn et al.; 2007). Studies developed in throughout the world have showed that there is an interaction between sociocognitive and sociodemographic factors in the set of predictors for the perceived social support in elderly people. For instance, Kuhirunyaratn et al. (2007) observed that the main predictor to the perceived social support in Thai older people is the level of instruction, the number of close friends, to know the community's health staff, the professional status, to belong to a social group, and the involvement in religious activities. A study developed in seven European countries (Italy, Greece, Spain, Lithuania, Germany, Portugal and Sweden) revealed that the psychosocial factors associated to the older people perception of a higher social support were to have a spouse and big families, the frequent use of health services, and to present low levels of depressive symptomatology. In that same study, the predictors for low levels of perceived social support were advanced age, and having experienced abuse, mainly psychologically (Melchiorre et al., 2013).

Given the importance of perceived social support on the third age, the confirmation that this variable can be influenced by other demographic, psychological and social dimensions, and the shortage of studies about this topic in the Brazilian context, this paper aims to identify psychosocial predictors of perceived social support in Brazilian elderly.

Method

Participants

One hundred and forty-four elderly, patients at the Health Basic Unit at Granja do Torto (Brasília, Brazil), participated in this study. The sample has a consecutive character, and it is constituted mostly (58.3%) by women. The medium age is 69.3 years-old (SD=6,61), with participants being from 60 to 89 years-old. Most of them are people with under 8 years of education (57.6%), who are not professionally active (88.9%), and have a marital partner (69.4%).

Measures

- Outcome variable:

Social support: It was evaluated through the translated and adapted version from the original *Social Provisions Scale* (Cutrona & Russell, 1987), which has 24 items using four Likert points of response (ranging from strongly disagree, which was quoted as 1, until strongly agree, quoted as 4). Some of the items are: "if something bad happened to me, I could not count on anyone's help" or "I feel responsible for another person's well-being". In this sample the Cronbach's alpha of the scale was 0.81.

- Psychosocial variables (possible predictors):

Age: It was asked directly for an open response, and subsequently categorized (60-69 years old, 70-79 years old, 80-89 years old).

Education: It was collected through self-reporting with the question "what is your level of education?". The answer options were: none, 1-3 years, 4-7 years, 8 years or more. It was then categorized in a dichotomous form (less than 8 years of education, 8 years or more of education).

Marital status: It was assessed through the question "what is your marital status?". The answer options were: single, married or in a stable union, divorced or separated and widow. It was then categorized in a dichotomous form (with and without a partner).

Depression: It was evaluated through the *Center for Epidemiological Studies Depression Scale* (CES-D) (Radloff, 1977) from the Brazilian version by Silveira and Jorge (1998). This instrument has 20 items and the answers are quoted from 0 to 3 (from rarely or never to most of the time or all the time), with 4 items in reverse quotation. Some examples of the items are "I felt scared" and "I felt happy". The Cronbach's alpha of the scale was 0.86.

Self-efficacy: It was evaluated through the *General Self-Efficacy Scale* (Schwarzer & Jerusalem, 1993) from the Brazilian version by Sbicigo et al. (2012). The scale has 10 items and the answers are quoted from 1 to 4 in a Likert scale. Some of the items are: "I feel confident to do well in unexpected situations" and "I can usually face any adversity". The Cronbach's alpha of the scale was 0.90.

Procedure

The sample was recruited through the Granja do Torto community (Brasília, Brazil) Health Basic Unit medical records, according to the following inclusion criteria: (1) being 60 years-old or older and (2) being psychologically capable of answering a questionnaire by interview. The questionnaire was applied by properly trained interviewers (Medicine students at Catholic University of Brasília) on the participants' houses, after being addressed in the Health Basic Unit by the responsible doctor and agreeing to participate in the research. All participants were informed of the investigation purpose and the data confidentiality issue was properly enlightened, as well as their volunteer participation on the research. The elderly who accepted to participate in the research were able to read and sign a free informed consent form. Additionally, the research was properly authorized by the Ethics Committee of the Catholic University of Brasília and by Granja do Torto's City Hall.

Data analysis

The data were analyzed by using the Statistical Package for the Social Sciences, version 18.0. (SPSS, Inc., Chicago, Illinois, USA).

In relation to sample characterization, the data were obtained from descriptive statistics, as well as distribution and frequency analyses. First, we checked the Spearman's correlation coefficients among sociodemographic (age, education, marital state), psychological and mental health (self-efficacy and depression) variables in order to identify the predictors that may be included on the hierarchical regression analysis. Subsequently, the hierarchical regression analyses were performed to identify the predictors of perceived social support. In block 1, the demographic variables "age" and "education" were introduced. In block 2 the marital variable "marital status" was included, and in block 3 the psychological and mental health variables "depression" and "self-efficacy" were included, one at a time. The focus of these analyses was to investigate the only variance explained by each variable (ΔR^2) on the outcome

Results

The association between demographic and marital variables and the outcome variable were significant (all $p<.01$). Lower age, higher educational level and having a partner is significantly correlated to perceived social support (r range = -.226 to .400).

Table 1 shows the correlations between sociocognitive, psychological and mental health variables and perceived social support. All correlations are significant (p range = .004 to <.001) and in expected

direction, (*r* range = .395 to -.413). For example, depression correlates significantly and negatively with perceived social support.

Based on these correlations results, sociodemographic and marital variables – education, age and marital status – were selected to be included on the steps 1 and 2 of the regression analyses (Table 2). On the third step, psychosocial and mental health variables (depression and self-efficacy) were included separately (Table 2 and 3).

Table 1

Spearman correlation coefficients between demographic, marital and psychological and mental health variables and outcome variable (perceived social support)

Demographic, Marital and Psychological and Mental Health Variables	Perceived Social Support
Age	-.287**
Education	.400**
Marital status	.226**
Depression	-.413**
Self-efficacy	.395**

**p< .01

The results of hierarchical regression analyses for demographic and marital variables and depression as predictors of perceived social support are presented in Table 2. Demographic variables (age and education) explained 17.9% of variance ($\Delta F(2, 141)=15.40$, $p =.000$), and marital variable "marital status" explained 0.41% of additional variance ($\Delta F(1, 140)=7.37$, $p =.007$). The participants who were younger ($\beta = -.17$), had a higher level of education ($\beta = .26$), were married or had a partner ($\beta = .16$),) had higher levels of perceived social support. The final model, with depression, explained 12.4% of additional variance ($\Delta F(1, 139)= 26.19$, $p =.001$). We observed that lower levels of depression are associated with higher levels of perceived social support. The overall model explained 32.5% of variance in perceived social support.

Table 2

Multiple hierarchical regression results with age, education, marital status, and depression as predictors of perceived social support

OUTCOME /PREDICTORS	ΔR^2	ΔF	β	t
Perceived Social Support				
Step 1	.179	15.396***		
Age			-.214	-2.651***
Education			.301	3.718***
Step 2	.041	7.371***		
Marital status			.205	2.715***
Step 3 (Final Model)	.124	26.185***		
Age			-.174	-2.365**
Education			.257	3.500***
Marital status			.156	2.227**
Depression			-.066	-.359***

$R^2= .344$; $R^2_{Adjusted}= .325$

**$p \le .01$. ***$p \le .001$.

The results of the hierarchical regression analyses for self-efficacy are presented in Table 3. This socio-cognitive variable explained 11.7% of additional variance in perceived social support ($\Delta F(1, 139)= 24.53$, $p = .000$). We observed that higher levels of self-efficacy are associated with higher levels of perceived social support ($\beta = .36$). In the final model, age lost significance. The overall model explained 31.8% of variance in perceived social support.

Table 3

Multiple hierarchical regression results with age, education, marital status, and self-efficacy as predictors of perceived social support

OUTCOME /PREDICTORS	ΔR^2	ΔF	β	t
Perceived Social Support				
Step 1	.179	15.396***		
Age			-.214	-2.651***
Education			.301	3.718***
Step 2	.041	7.371***		
Marital status			.205	2.715***
Step 3 (Final Model)	.117	24.527***		
Age			-.071	-.911
Education			.291	3.975***
Marital status			.177	2.528**
Self-efficacy			.363	4.953***

R^2 = .337; $R^2_{Adjusted}$ = .318

**$p \leq .01$. ***$p \leq .001$.

Discussion

This paper aimed to identify psychosocial predictors of perceived social support in Brazilian older people. Therefore, the results of this research enabled to show that age, education level, marital status, depression and self-efficacy are significant predictors of perceived social support in this sample.

Regarding sociodemographic variables (demographic and marital), it was confirmed that lower age (associated to depression), higher level of education and being married (or having a stable partner) are significant predictors for high perceived social support among these older people. The data related to the age in this sample of Brazilian elderly are congruent to other studies which reveal that the perceived social support decrease with the aging process. Bowling (2011) determined that, when compared with other people who are younger than 65 years-old, the ones who are older report as having less people to search for support and comfort in a crisis, as well as people to give practical support. Melchiorre et al. (2013) determined that low levels of perceived social support are associated to advanced age in European older people. This fact can be explained by Cartensen's (1987, 1992) theory of emotional selectivity. It describes the decrease of the social activity during the aging process as reflex of the conjunction of selective processes that initiate early in life and have a great adaptive value, culminating with time and energy concentration in close emotional contacts, like close friends and family. In relation to the presence of the spouse/partner as a predictor for perceived social support in Brazilian older people, the results of this research are also congruent with other studies with the same sample type (Drame et al., 2013; Feng, Jones, & Wang, 2015; Melchiorre et al., 2013). For example, a study by Feng, Jones and Wang (2015), with Chinese elderly, demonstrated that the survival rates at that community were strongly associated to the perceived social support, and that it was, then, associated to living with a spouse. The study by Drame et al. (2013) revealed that living alone was one of the mainly predictors for hospitalization and death after hospitalization in the elderly. The study by Melchiorre et al. (2013) showed that having a spouse was associated with a high social support perception in Italian, Spanish, Portuguese, Greek, Lithuanian, German, and Swedish elderly. We consider that these results, corroborated by other authors, are on the expected direction, as having a partner (often for the whole life) and a close partner guarantee the social support perception, especially emotional support. Regarding the issue of education, other studies developed in different cultures, as the Thai (Kuhirunyaratn et al., 2007) and the North American (Barrett, 1999) ones, also verified that a high level of instruction is a strong predictor for perceived social support in elderly. This fact can possibly be associated to the capacity of the elderly who are more educated of being well prepared to recognize the usefulness of the resources that surround them and more able to access useful information. (e.g.: available health services).

Concerning mental health (depression) and psychological variables (self-efficacy), it was observed that low levels of depression and high levels of self-efficacy are significant predictors for perceived social support among Brazilian older people studied. These results also corroborate scientific literature (Kuhirunyaratn et al., 2007; Melchiorre et al., 2013; Olagunju et al., 2015). For example, a study developed in seven European countries (Italy, Greece, Spain, Lithuania, Germany, Portugal and Sweden) showed that

one of the psychosocial factors most associated to perceived high social support was low levels of depressive symptomatology (Melchiorre et al., 2013). There are studies which show that depression and social support influence one another. For example, Olagunju et al. (2015) during a study with Nigerian older people noticed that low levels of social support were related to higher depression levels, at the same time that depression was negatively correlated to social support, mainly regarding significant people (members of the family). We consider that this fact makes sense, because we believe that good mental health promotes a real perception of social support available, the same way that perceiving suitable social support in an advanced age provides general well-being and promotes mental health, especially regarding depression. The relation between social support and self-efficacy is not a topic studied among the older people – which reinforces the relevance of studies like this. However, the relation between these two cognitive dimensions has been deepened in other health contexts. For instance, Wang, Qu and Xu (2016) observed that various types of social support (objective and subjective) are positive and significantly correlated with self-efficacy in psychiatric patients. One of the few studies about the influence of the self-efficacy in perceived social support in older people was developed by Warner et al. (2011). They found this influence effectively on the self-efficacy over social support, which associated to physical activity. In this study with German older people it was also possible to notice that there is a synergy among self-efficacy and perceived social support: older people with low level of self-efficacy had lower probability of being active, even when having high levels of social support; the same way people with low levels of perceived social support had a strong probability of being inactive, even when having high levels of self-efficacy. In other words, the results of that study reveal that the self-efficacy increases levels of perceived social support, however, when it comes to the physical activity practice specifically, these two cognitive dimensions interact and work together in promoting activities in the elderly. These results point out to the need of evaluating this interaction related to other health behaviors, bearing in mind the health promotion in older people. As the self-efficacy is the person's belief in their ability of performing a specific action and achieving the desired result (Bandura 1997), it is understood that the older people who have this dimension strengthened are the ones who can also perceive the social support available around them. This relation is very important to the health, mainly under the scope of the third age and the active and healthy aging.

This study contains some limitations, namely the possible memory bias in issues like depression, as when the older people were asked to remember a series of events from the last week. We also consider important the development of longitudinal studies in order to better understand the evolution of perceived social support in the third age. Additionally, it would be relevant to develop similar researches with larger samples. That was not possible in this study as the participants who accepted to participate are all the ones inside a specific community (Granja do Torto, Brasília, Brazil). Extending the research to other nearby contexts would be a good future option. In this case it was not possible due to financial and logistic constraints which the study could not endure. Nevertheless, this is a pioneer study which tries to understand the psychosocial predictors of perceived social support in Brazilian elderly population.

Conclusion

The perceived social support in older people is associated to age, education, marital status, depression and self-efficacy. These results are important so that future interventions under the scope of physical and mental health promotion of the elderly can consider these determinants as a way of increasing its efficacy.

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