



**Avaliação emocional e cognitiva em grupos de idosos diferenciando a prescrição social**

**Emotional and cognitive evaluation in groups of older adults differentiating social prescription**

**Evaluación emocional y cognitiva en grupos de adultos mayores diferenciando la prescripción social**

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## Resumo

A Prescrição Social (PS) foi desenvolvida sobretudo no Reino Unido e foi reconhecida pelo Serviço Nacional de Saúde britânico como uma abordagem inovadora para apoiar a sustentabilidade do sistema de saúde. A PS tem o potencial de promover parcerias entre estruturas comunitárias, ajudando assim a ligar os sectores social e da saúde para formar um sistema local de PS. O nosso objetivo foi avaliar o desempenho de um programa de PS, examinando o impacto no desempenho cognitivo e no bem-estar emocional. Foi aplicado um questionário a uma amostra de 60 idosos não institucionalizados, com idades compreendidas entre os 66 e os 96 anos. Foram definidos dois grupos de 30 participantes: Grupo PS (que foram incluídos no programa de prescrição social) e Grupo Controlo (que não beneficiam de qualquer programa). Todos os instrumentos foram validados para a população portuguesa. O bem-estar emocional foi avaliado através da Rosenberg Self-Esteem Scale e o desempenho cognitivo foi avaliado através do Mini-Mental State Examination. Os resultados mostraram que o grupo PS tem níveis mais baixos de comprometimento cognitivo e uma pontuação média de autoestima mais elevada, mas não foram detetadas diferenças estatisticamente significativas na escala de desempenho cognitivo. Estes resultados sugerem que os programas de PS têm um impacto especial e positivo na autoestima dos idosos. Esta evidência realça a importância de considerar estes programas como um eixo estratégico de intervenção para o envelhecimento ativo. Constatou-se a mais-valia da PS como mecanismo potenciador de benefícios associados à saúde e ao bem-estar. Futuras investigações deverão ser realizadas com acesso a uma amostra mais alargada e explorar outras variáveis dependentes.

**Palavras-chave:** Promoção da Saúde; Prescrição Social; Envelhecimento Saudável.

## Abstract

Social Prescription (SP) has been developed mostly in the United Kingdom (UK) and has been recognised by the UK National Health Service as an innovative approach to support the sustainability of the health system. It also has the potential to promote partnerships between community structures, thereby helping to link the health and social sectors to form a local SP system. Our objective was evaluate the performance of a SP programme, examining the impact on cognitive performance and emotional well-being. A questionnaire was applied to a sample of 60 non-institutionalized older adults, aged 66-96 years. Two groups of 30 participants were defined: SP Group (that were included in the social prescription program) and Control Group (that do not benefit from any program). All the instruments were validated for the Portuguese population. Emotional well-being was assessed using the Rosenberg Self-Esteem Scale and cognitive performance was assessed using the Mini-Mental State Examination. Results showed



that the SP group has lower levels of cognitive impairment and a higher average self-esteem score, but no statistically significant differences were detected in the cognitive performance scale. These results suggest that the SP programs have a special and positive impact on the self-esteem of the elderly. This evidence highlights the importance of considering these programs as a strategic intervention axis for active aging. The added value of SP as a mechanism that fosters benefits associated with health and well-being was noted. Future investigations should be conducted with access to a larger sample and explore other dependent variables.

**Keywords:** Health Promotion; Social Prescription; Healthy Aging.

### Resumen

La prescripción social (PS) se desarrolló principalmente en el Reino Unido y ha sido reconocida por el Servicio Nacional de Salud británico como un enfoque innovador para apoyar la sostenibilidad del sistema sanitario. También tiene el potencial de promover asociaciones entre estructuras comunitarias, ayudando así a vincular los sectores social y sanitario para formar un sistema local de PS. Nuestro objetivo era evaluar el rendimiento de un programa de SP examinando el impacto sobre el rendimiento cognitivo y el bienestar emocional. Se administró un cuestionario a una muestra de 60 ancianos no institucionalizados de edades comprendidas entre los 66 y los 96 años. Se definieron dos grupos de 30 participantes: Grupo PS (que fueron incluidos en el programa de prescripción social) y Grupo Control (que no se beneficiaron de ningún programa). Todos los instrumentos fueron validados para la población portuguesa. El bienestar emocional se evaluó mediante la Rosenberg Self-Esteem Scale y el rendimiento cognitivo mediante el Mini-Mental State Examination. Los resultados mostraron que el grupo PS tenía niveles más bajos de deterioro cognitivo y una puntuación media de autoestima más alta, pero no se detectaron diferencias estadísticamente significativas en la escala de rendimiento cognitivo. Estos resultados sugieren que los programas de PS tienen un impacto especial y positivo en la autoestima de las personas mayores. Esta evidencia pone de manifiesto la importancia de considerar estos programas como un eje estratégico de intervención para el envejecimiento activo. Se constató el valor añadido de la PS como mecanismo para potenciar los beneficios para la salud y el bienestar. Futuras investigaciones deberían realizarse con acceso a una muestra más amplia y explorar otras variables dependientes.

**Palabras Clave:** Promoción de la Salud; Prescripción Social; Envejecimiento Saludable.



## Introduction

Social Prescription (SP) programs have emerged as a pioneering approach primarily within the United Kingdom (UK), heralded as an innovative strategy acknowledged by the UK National Health Service for bolstering the sustainability of the healthcare system. This unique initiative stands as a bridge connecting health and social sectors through the facilitation of community partnerships, paving the way for the establishment of local SP systems. The primary focus of this study was to evaluate the efficacy of a SP program, specifically examining its impact on cognitive performance and emotional well-being among older adults.

In light of the rising significance of SP initiatives, the research was designed to delve into the effects of these programs on the health and well-being of non-institutionalized older adults, aged between 66 and 96 years. The study engaged a sample of 60 individuals, dividing them into two distinct groups: the SP Group, comprising participants involved in the SP program, and the Control Group, representing individuals not enrolled in any specific program.

To assess the impact of the SP program, validated instruments for the Portuguese population were utilized. Emotional well-being was measured using the Rosenberg Self-Esteem Scale (RSE), while cognitive performance was evaluated through the Mini-Mental State Examination (MMSE). The findings unveiled intriguing results, demonstrating a lower level of cognitive impairment and a higher average self-esteem score among participants in the SP group. Notably, while no statistically significant differences were detected in cognitive performance between the two groups, the evidence suggests a noteworthy positive impact of SP programs on the self-esteem of the elderly.

These outcomes emphasize the pivotal role of SP initiatives as a strategic intervention axis for promoting active aging and enhancing the overall well-being of older adults. The study recognizes the added value of SP as a mechanism fostering health and well-being benefits, specifically through the enhancement of self-esteem among the elderly. However, the study acknowledges the need for further exploration, urging future investigations to encompass larger sample sizes and extend the analysis to explore additional dependent variables.

This research contributes to the growing body of evidence supporting the potential of SP programs in addressing the needs of the aging population, thereby reinforcing the significance of integrating such initiatives within healthcare systems to support the health and well-being of older individuals. Continued research and exploration will provide a more comprehensive understanding of the impact and efficacy of SP programs, potentially offering avenues for further enhancement and development of strategies promoting the well-being of older adults.



## State of the Art

### Social Prescribing

In Portugal, old age is considered from the age of 65, and it is associated with a gradual loss of physical and mental faculties, which can lead to a general decline in the individual's intrinsic capacity, low self-esteem, reduced well-being and an increased risk of developing various diseases. In this line of thought, the impact of all these changes can result in the development of depressive conditions, which are a potentiating factor for mortality in this age group. SP plays an extremely important role in this equation. SP is an innovative strategy to respond to the non-clinical needs of the population.

SP has been in place for a good number of years now, albeit on a relatively small scale. Brandling and House (2009) for example, cite the Bromley-By-Bow scheme which was developed in the 1990s. Friedli and Watson (2004) reported on a SP scheme for mental health in 2004.

The terms 'social prescribing', 'community referral' and 'non-traditional providers' have all been used to describe a way of expanding the range of non-medical options that could be available to healthcare professionals when a person has needs that are related to socioeconomic and psychosocial issues (Brandling & House, 2009; Friedli et al., 2008; National Health Service [NHS], 2011; South et al., 2008).

Whilst the concept of SP is relatively recent, the term is now more frequently used than ever. SP is listed as one of the ten high impact actions in the General Practice Forward View. The term social prescribing, however, may mean slightly different things to different people (NHS England, 2016).

SP shares the values that underpin the wider personalisation movement in health and social care that have paved the way for social prescribing as we see it today (Department of Health, 2008; HM Government, 2010; HM Government, 2012; NHS, 2014; NHS England, 2016).

Many people in the UK are in situations that have a detrimental effect on their health. The Marmot Review provided comprehensive analysis on the causes and consequences of health inequalities in England. Factors contributing to health inequalities can include financial, educational, poor housing, low self-esteem, isolation, relationship difficulties, and physical and mental health problems. There are also more people who are living longer and struggling to cope and adapt to living with Long Term Conditions which can't be addressed by a clinical consultation. Almost without exception, people want to improve their situation, particularly those with complex needs. These changes can seem impossible to navigate or achieve without sustained support and the motivation needed to make a positive change. Without support, negative consequences can build up, such as depression, anxiety and social isolation (Marmot, 2010).



A general practitioner (GP) can quickly work out that the traditional options might have only a limited impact if, for example, poor housing is a factor in a person's emotions; finance and employment concerns also have an adverse impact. It has been estimated that around 20% of patients consult their GP for what is primarily a social problem (Torjesen, 2016). In fact, the Low Commission reported that 15% of GP visits were for social welfare advice. As well as facilitating the use of non-clinical support for people, it also leads to NHS health care professionals developing wider relationships with their communities and the third sector, and vice-versa. SP is an opportunity to implement a sustained structural change to how a person moves between professional sectors and into their community. To fully address the social determinants of health, SP schemes view a person not as a 'condition' or disability, but quite simply as a person (The Low Commission, 2015).

## Methods

### Instruments

Data was collected on demographic variables such as age, gender, marital status, schooling, region where you live, among others. Emotional well-being was assessed using the Rosenberg Self-Esteem Scale (RSE). The purpose of the 10 item RSE scale is to measure self-esteem. Originally the measure was designed to measure the self-esteem of high school students. However, since its development, the scale has been used with a variety of groups including adults, with norms available for many of those groups (Rosenberg, 1979). The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. Mini-Mental State Examination (MMSE) is a classic paper-and-pencil test (one sheet), with a simple and quick application (5-10 minutes) and untimed execution. In a routine assessment (as well as in our study aimed to assess the characteristics of the instrument for a daily routine application), the Portuguese version was used, as well as the application instructions and scoring rules proposed by Santana et al. (2016). MMSE was developed in the 70's for the identification of patients with cognitive impairment in field studies. It is currently the most widespread brief cognitive test and with the widest range of applications for mental status assessment, in epidemiological and clinical studies as well as in clinical practice, where it is used at all levels of healthcare, as a screening tool for cognitive impairment and dementia, as in longitudinal and outcome assessment (Nieuwenhuis-Mark, 2010). The test allows for a maximum 30-point score and the higher the score, the more MMSE performance.



## Data Analysis Procedure

The variables were descriptively analyzed using frequency distribution tables (in the case of nominal variables) and an examination of certain measures such as the mean, standard deviation, minimum, maximum and median (in the case of quantitative variables). The reliability of the scales was assessed using Cronbach's alpha.

For comparison between groups and Student's t-test was used for two independent samples. The assumption of population normality for carrying out these parametric tests was validated under the central limit theorem.

Statistical Analysis Statistical Package for the Social Sciences (version 24.0, IBM SPSS, Chicago, IL) software was used for statistical analysis.

## Participants

Participants were recruited from the general population, selected in a non-stratified and non-probabilistic way, following convenience criteria. Inclusion criteria were being aged 65 or over, and given the particularity of the target population, the presence of advanced dementia and/or cognitive deterioration was specified as an exclusion criterion. The method of inquiry was through a face-to-face questionnaire. The members of the SP group were collected at the Quinta de Primeira Fase da Associação de Solidariedade Social "Arca da Vida" (Associação Arca da Vida de Mira, since 2002, where social prescription initiatives were pioneered and through contact with the network of FORDOC in Portugal, with a special focus on the area of the central region of the country).

## Results

This study involved 60 participants (with two predominantly female samples). Two subgroups were included: SP Group (n=30) and Control Group (n=30). These two groups share a relatively similar sociodemographic profile (see Table 1) SP Group has an average age of  $70,6 \pm 5,3$  [minimum 66; maximum 96 years old) and an average  $6.4 \pm 4.0$  [minimum 1; maximum 18] years of education. Control Group has an average age of  $70,5 \pm 5,1$  [minimum 67; maximum 94 years old) and an average  $6.2 \pm 4.0$  [minimum 1; maximum 18] years of education.

**Table 1** - Summary table of sociodemographic characteristics

|                                     | SP Group<br>(n=30) |       | Control Group<br>(n=30) |       |
|-------------------------------------|--------------------|-------|-------------------------|-------|
|                                     | <i>n</i>           | %     | <i>n</i>                | %     |
| <b>Gender</b>                       |                    |       |                         |       |
| Female                              | 21                 | 70,0% | 19                      | 63,3% |
| Male                                | 9                  | 30,0% | 11                      | 36,7% |
| <b>Marital Status</b>               |                    |       |                         |       |
| Single                              | 2                  | 6%    | 4                       | 13%   |
| Married / Cohabiting                | 21                 | 70%   | 20                      | 68%   |
| Separated/Divorced                  | 0                  | 0%    | 0                       | 0%    |
| Widowed                             | 7                  | 24%   | 6                       | 20%   |
| <b>Age</b>                          | Mean 70,6 (SD 5,3) |       | Mean 70,5 (SD 5,1)      |       |
| <b>Number of years of schooling</b> | Mean 6,4 (SD 4,0)  |       | Mean 6,2 (SD 3,8)       |       |

In a first analysis of table 2, it appears that there are good reliability results for both scales, because Cronbach alpha values of 0.7 or higher indicate acceptable internal consistency.

**Table 2** – Reliability analysis and t-tests

|             | $\alpha$ Cronbach | SP Group<br>(n=30) |                | Control Group<br>(n=30) |                | <i>p</i> |
|-------------|-------------------|--------------------|----------------|-------------------------|----------------|----------|
|             |                   | Mean               | Std. Deviation | Mean                    | Std. Deviation |          |
| <i>MMSE</i> | 0,79              | 27,0               | 2,4            | 26,2                    | 2,2            | 0,086    |
| <i>RSE</i>  | 0,74              | 17,2               | 1,8            | 14,9                    | 1,3            | <0,001   |

There are statistically significant differences in emotional well-being depending on the group. The average RSE is significantly higher in the SP group ( $p < 0,001$ ). Even though the cognitive performance results are higher in the SP group, it cannot be said that there are statistically significant differences ( $p = 0,086 > 0,05$ ).





## Discussion

The study's focus on evaluating the impact of SP programs on the cognitive performance and emotional well-being of older adults offers valuable insights into the potential benefits of such interventions. The findings revealing a positive impact on self-esteem and lower levels of cognitive impairment among participants in the SP group are noteworthy.

The results indicating higher self-esteem in the SP group align with the growing understanding of the multifaceted benefits of SP initiatives. Social activities, community engagement, and the sense of belonging and purpose that these programs offer can significantly contribute to an individual's self-esteem. This observation underscores the importance of social connectedness and engagement in promoting a positive self-image, especially among older adults.

The absence of statistically significant differences in cognitive performance between the SP and control groups suggests that while SP programs might not directly impact cognitive abilities as measured by the Mini-Mental State Examination (MMSE), they do contribute positively to other crucial aspects of mental well-being. This implies that the mechanisms through which SP programs exert their influence might be more attuned to emotional and social well-being rather than direct cognitive enhancement.

Furthermore, the findings emphasize the significance of considering SP programs as a pivotal strategy for active aging. The study highlights the value of integrating SP within healthcare systems to support the health and well-being of the aging population. The positive impact on self-esteem suggests that these programs can play a crucial role in addressing emotional needs and promoting a sense of worth and belonging among older individuals.

However, the study acknowledges the limitations inherent in its sample size and the focus on only two dependent variables. To enhance the understanding of the comprehensive impact of SP programs, future investigations should consider expanding the sample size and exploring additional dependent variables. It would be beneficial to include a broader range of assessments covering various aspects of mental health, social engagement, and overall quality of life to capture a more comprehensive picture of the benefits associated with SP programs.

In conclusion, the findings of this study contribute to the growing body of evidence supporting the role of SP programs in promoting emotional well-being, particularly in fostering higher self-esteem among older adults. These programs have the potential to serve as a vital intervention to address the emotional and social needs of the elderly, thereby playing a significant role in supporting active and healthy aging. Further research and continued development of SP initiatives will help refine and expand the



understanding of their efficacy and potential impact on the health and well-being of older adults.

## Conclusion

The findings presented in this study demonstrate a compelling link between SP programs and the enhancement of self-esteem among the elderly. The observed positive impact underscores the significance of these initiatives as catalysts for nurturing a sense of self-worth, belonging, and confidence among older adults, constituting a crucial facet of their emotional well-being.

This evidence not only emphasizes the role of SP programs in fortifying the self-esteem of the elderly but also underscores their broader significance as a strategic axis for active aging. The profound implications of these initiatives go beyond mere engagement; they signify a paradigm shift in how we address the holistic well-being of older populations. SP programs, by facilitating social connections and fostering a sense of purpose, serve as pivotal mechanisms in promoting active and fulfilling lives for the elderly.

Moreover, this study highlights the added value of SP initiatives in augmenting overall health and well-being. The significance of these programs extends beyond singular health metrics and delves into the realm of emotional and social welfare, acknowledging the vital role they play in improving the quality of life for older individuals. By recognizing and leveraging the social determinants of health, SP programs manifest as invaluable tools in addressing the multifaceted needs of an aging population.

Nevertheless, while these findings provide valuable insights, they prompt the necessity for further exploration and depth in research. Future investigations should endeavor to broaden the scope by accessing larger sample sizes, thus enabling a more comprehensive analysis of SP programs' impact. Exploring additional dependent variables beyond cognitive performance and self-esteem will provide a more nuanced understanding of the diverse array of benefits these programs may offer. This expansion in research parameters will undoubtedly contribute to a deeper comprehension of the efficacy and potential of SP interventions, further solidifying their place as indispensable components in the pursuit of enhancing the health and well-being of older adults.

In conclusion, these results suggest that the SP programs have a special and positive impact on the self-esteem of the elderly.

This evidence highlights the importance of considering these programs as a strategic intervention axis for active aging. The added value of SP as a mechanism that fosters benefits associated with health and well-being was noted. Future investigations should be conducted with access to a larger sample and explore other dependent variables.



## Implications in clinical practice

The implications of our research findings hold substantial potential for reshaping and expanding the landscape of clinical practice, particularly in the realm of SP. While the existing literature might portray SP as an underutilized alternative within medical practice, the evidence we have presented in this study serves as a clarion call to recognize the efficacy and viability of SP as a potent intervention.

Our research not only reinforces the notion that SP is effective but also underscores its pivotal role in fostering active and healthy aging among older populations. By advocating the implementation of SP initiatives, clinical practice can transcend the traditional paradigm centered solely on medication, offering a holistic approach that supports and sustains the well-being of the elderly.

The significance of SP lies in its ability to serve as a continuous conduit, ensuring the ongoing engagement of older individuals in cultural and social life. This integration fosters a sense of belonging, purpose, and social connectivity, all of which are instrumental in enhancing overall health and well-being. Moreover, SP's emphasis on cultural and social infrastructures as alternatives to medication presents a paradigm shift in clinical approaches. It encourages not only the use but also a greater return on investment in cultural and social assets as powerful resources for promoting health and wellness among older adults.

This shift in perspective aligns with a more comprehensive and preventive approach to healthcare. Rather than solely relying on pharmaceutical interventions, the incorporation of SP into clinical practice offers a holistic method that complements medical treatment. It stands as a vehicle to harness the inherent potential of community resources, cultural activities, and social engagement, all of which significantly contribute to the mental, emotional, and physical well-being of the aging population.

The implementation of SP within clinical practice offers a transformative approach, facilitating a departure from the conventional medical model by incorporating a more inclusive, community-centered, and holistic strategy. Recognizing SP as an effective alternative that promotes active and healthy aging not only expands the spectrum of care but also underscores the value of social and cultural engagement in enhancing the overall well-being of older individuals. This shift serves as an invitation to reevaluate and restructure clinical practices, ultimately fostering a more comprehensive and enriching approach to healthcare for older populations.

In conclusion, SP is rarely implemented as an alternative in medical practice, judging by the literature.

The evidence we have presented in this research indicates that SP works and that SP is a practice that can result in active and healthy ageing.



SP has the potential to continuously involve older people in cultural and social life, and SP encourages the use and greater return on cultural and social infrastructures as an alternative to medication.

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