

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1223 (26.01.2017).  
1223 *Journal of Education, Health and Sport* eISSN 2391-8306 7

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 01.07.2017. Revised: 02.07.2017. Accepted: 29.07.2017.

## STRONG SENSE OF COHERENCE CONTRIBUTES TO SUCCESSFUL AGING AND HIGHER SATISFACTION WITH LIFE

## SILNE POCZUCIE KOHERENCJI PRZYCZYNYKIEM DO POMYŚLNEGO STARZENIA I LEPSZEJ SATYSFAKCJI Z ŻYCIA

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### Summary

Sense of coherence (SOC) is a core concept within Antonovsky's salutogenic theory and is argued to be a psychological determinant of health. Salutogenic approach proposed by Antonovsky emphasized the importance of coping resources in dealing with stress. The general objective of the study was to empirically explore the relationship between the generalized resistance resources of sense of coherence with successful aging and satisfaction with life. The sense of coherence (SOC-29), life satisfaction (SWLS) and successful aging (SAS) was assessed in a sample of  $N = 67$  participants aged 80 years or older. The present study reveals that strong SOC is associated with better life satisfaction and better successful aging. Interaction effect of age to SOC was no found. Overall, the findings provided support that SOC is an important salutary resource in association with life satisfaction and successful aging among older people.

**Key words:** sense of coherence, SOC, successful aging, life satisfaction

## **INTRODUCTION**

Sense of coherence (SOC) is a core concept of Aaron Antonovsky's salutogenic theory and is argued to be a psychological determinant of health. However SOC does not represent a fixed way of behaving in a certain way in a given situation: it rather reflects a flexible orientation to life that promotes successful coping. The SOC refers to an enduring attitude and measures how people view life and, in stressful situations, identify and use their GRRs to maintain and develop their health. The SOC consists of at least three dimensions: comprehensibility, manageability and meaningfulness. Comprehensibility is the extent to which events are perceived as making logical sense, that they are ordered, consistent, and structured. Manageability is the extent to which a person feels they can cope. Meaningfulness is how much one feels that life makes sense, and challenges are worthy of commitment [1-4].

Successful aging refers to physical, mental and social well-being in older age. Although the concept goes back over 50 years the term received only minimal use to this time. Rowe and Kahn suggested successful aging included three main components: low probability of disease and disease - related disability, high cognitive and physical functional capacity, and active engagement with life. High cognitive and physical functional capacity provides "potentials for activity, " in other words, "what a person can do, not what he or she does do". Finally, active engagement with life is concerned with interpersonal relationship and productive activity. The combination of these three major components represents the concept of successful aging [5,6].

Life satisfaction is the way people show their emotions and feelings (moods) and how they feel about their directions and options for the future [7]. Life satisfaction is defined as one's evaluation of life as a whole, rather than the feelings and emotions that are experienced in the moment. Based on the research 'The Study of Life Satisfaction', quality of life is associated with living conditions, such as food, health, shelter, and so on. By contrast, life satisfaction is defined as a state of emotion, like happiness or sadness. The sources of life satisfaction are not completely understood. According to Veenhoven, they are a complex combination of: collective action, individual behaviour, simple sensory experiences, higher cognition, stable characteristics of the individual, the environment, chance factors [8-10].

## **AIM OF THE STUDY**

The general objective of the study was to empirically explore the relationship between the generalized resistance resources of sense of coherence with successful aging and satisfaction with life. The main goals were as follows:

1. To examine whether SOC is associated with four dimension of successful aging

2. To examine whether SOC is associated with general satisfaction with life
3. To examine whether age differences in SOC level are presence

## **MATERIAL AND METHODS**

### **Participants**

A total of 67 subjects aged 75 years or older were invited to participate in this study. Participants were enrolled between September 2016 and June 2017. A printed information sheet will be provided to promote recruitment. The inclusion criteria for participants included: over 80 years of age, having resided in the silesian and malopolska voivodeship for more than six month, and no history of previously diagnosed mental disorder (e.g. dementia, depression, anxiety states). Four exclusion criteria were made: cognitive impairment, communication difficulties mainly caused by profound speech difficulties and severe hearing loss, reduced physical functioning that made completion of the protocol impossible or, refusal to participate. Baseline characteristics of participants are presented in Table 1.

### **Measures**

Following measures were used in this study: 29-item Sense of coherence (SOC-29) [11], The Satisfaction with Life Scale (SWLS) [12,13], and Successful Aging Scale (SAS) [14]. Description of measurements is presented below.

SOC-29 scale was developed by Antonovsky's and contains three main subcomponents of SOC, i.e.comprehensibility (cognitive), manageability (instrumental/behavioural) and meaningfulness (motivational). The scores on each item are ranged from one (weak) to seven (strong). The SOC variable is a sum variable consisting of three factors based on individual questions [11].

The SWLS was developed by Diener et al., and is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. There are five items: (1) "In most ways my life is close to my ideal"; (2) "The conditions of my life are excellent"; (3) "I am satisfied with my life"; (4) "So far I have gotten the important things I want in my life"; and (5) "If I could live my life over, I would change almost nothing". Respondents are asked to answer each item on a 7-point Likert scale (from 1= strongly disagree to 7 = strongly agree). Answers are added to create summary score from 5–35 points [12,13].

SAS scale is a comprehensive measuring instrument that combines all relevant components of successful aging and is recommended as a research and clinical screening tool. Measurement consists of items that reflect the unique characteristics of complex construct of successful aging. The scale

consist of 14 items scored from 1 (strongly agree) to 7 (strongly disagree) and allow to assessment of 3 dimensions: healthy lifestyle habits, adaptive coping, and engagement with life [14].

### Statistical analysis

STATISTICA Statistical Package in version 10.0. was used for the statistical analysis. Descriptive statistics (means and standard deviations) was first performed. Correlations were tested by the Pearson r coefficients. Kruskal-Wallis Anova were used to investigate differences between groups. The adopted level of statistical significance was  $p < 0,05$ .

## RESULTS

Table 1. Baseline characteristics of sample

Variables	
<b>Gender:</b>	
male (n; %)	30; 44,8%
female (n; %)	37; 55,2%
<b>Age</b>	
mean SD	81,4 ± 5,1
range (min-max)	75-90
75-80 yo (n; %)	32; 47,8%
81-85 yo (n; %)	23; 34,3%
86-90 yo (n; %)	12
<b>Presence of disease:</b>	
yes (n; %)	55; 82,1%
no (n; %)	12; 17,9%

Table 2. Descriptive statistics of sense of coherence, successful aging and life satisfaction

Variables	Means ± Standard deviations
SOC-29	148,3 ± 24,2
SOC: comprehensibility	53,3 ± 10,3
SOC: manageability	46,8 ± 9,8
SOC: meaningfulness	48,2 ± 9,9
SAS overall	54,0 ± 20,8
SAS: healthy lifestyle habits	20,1 ± 9,4
SAS: adaptive coping	17,3 ± 8,8
SAS: engagement with life	16,6 ± 11,3
SWLS	26,1 ± 11,7

Table 3. Descriptive statistics of sense of coherence due subjects age

<b>Variables</b>	<b>75-80 yo</b>	<b>81-85 yo</b>	<b>86-90 yo</b>	<b>p value</b>
SOC-29	147,5 ± 26,1	148,6 ± 23,5	149,5 ± 24,0	0,846
SOC: comprehensibility	51,7 ± 9,4	55,6 ± 10,1	54,1 ± 10,8	0,613
SOC: manageability	47,1 ± 9,1	45,4 ± 9,9	47,5 ± 10,2	0,909
SOC: meaningfulness	48,7 ± 10,6	47,6 ± 10,2	47,9 ± 9,4	0,964

## DISCUSSION

Having a strong SOC is believed to be a major coping resource for maintaining good health that includes both the ability to mobilise resources in order to manage the situation and the ability to regulate emotions in the extreme situation. According to Aaron Antonovsky, a persons with a strong SOC are more likely to define stimuli as non-stressors and to assume adapt automatically to the demand. When the stimuli are appraised as stressors, someone with a strong SOC is more likely to define them as comprehensible, manageable and meaningful. A strong SOC is also associated with health behaviours and health status. Persons with a strong SOC engage in adaptive health behaviours more often than those with a weak SOC [1,15]. Furthermore, high SOC scores have been shown to protect from negative health outcomes in terms of perceived health [16], quality of life [17], mortality [18], and disability [19].

The main purpose of this study was to examine the relationship of sense of coherence with successful aging and life satisfaction. The novum of work is the selection of the study group for high-aged patients. Antonovsky considered ageing as a process of human development instead of just a biological and mental degradation of the body [20]. According to the SOC model, successful aging encompasses selection of functional domains on which to focus one's resources, optimizing developmental potential (maximization of gains) and compensating for losses - thus ensuring the maintenance of functioning and a minimization of losses. SOC can promotes successful aging in a number of ways. To feel committed to goals contributes to feeling that one's life has a purpose. Additionally, goals help organize behavior over time and across situations and guide attention and behavior, as well as, focus the limited amount of available resources [21-23]. Results of the study presented here indicate to positive relationship of SOC with successful aging. In line with the hypotheses, strong and moderate correlations of overall SOC and SOC domains with with all dimensions of successful aging were noted. This finding indicate that reported scores on SAS scale were generally higher in subjects with high values of SOC – compared to subjects with low SOC. The present study also revealed that sense of coherence influence on succesfful aging status (table 3). Similar results were noted by others authors. Wiesmann et all., investigated the role that SOC

and generalized resistance resources have for older people's experience of life satisfaction among 387 Germans with a mean age of 73.8 years. The results showed that the SOC-as the ability to cope in everyday life-, was factor that contributed to older people's satisfaction with life [24,25]. Langeland showed that SOC was identified as a predictor of change in life satisfaction over one year among people with mental health problems [26]. Branholm et al., demonstrated that sense of coherence score was positively and significantly associated with levels of satisfaction with life [27].

On a theoretical basis, Antonovsky argues that SOC development thus begins in early childhood and is relatively stable after the age of 30. After this age it is assumed to be constant level in that most people have made their major life commitments with regard to marriage, occupation and work, and lifestyle, and have established their social roles. All this provides a stable set of life experiences that foster SOC [2]. However a few others authors have found that SOC is less stable during lifetime. The SOC may have been influenced by negative life events and could be argued that it should be a stable personality disposition [28,29]. The result of the present study are in line with salutogenic theory. Age differences between match-aged group were no found (table 3).

## **CONCLUSIONS**

The results supported hypothesis about a positive association between SOC and life satisfaction, as well as, between SOC and successful aging process.

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