

GLOBAL SELF ESTEEM IN A SAMPLE OF CZECH SENIORS AND ADOLESCENTS

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In this paper, we have reported on the results of two follow up studies concerning various aspects of global self esteem (GSE). We used the Rosenberg self esteem scale to measure GSE. In study no. 1, we examined the level of global self esteem with respect to gender perspective within a sample of 106 seniors. In the follow up study, we compared the levels of global self esteem of seniors and a sample of 102 adolescents.

The results of study no. 1 showed significant differences in GSE between men and women in the sample of seniors. The results of the follow up study showed significant differences in the levels of GSE between seniors and adolescents.

Keywords: Seniors, self esteem, motor activity.

INTRODUCTION

Self esteem as a component of self concept is affected by many intervening factors including cultural, ethnical, and social factors. The role of self esteem as an indicator of an individual's appraisal of personal value in his/her overall individual self concept has been one of the major issues in personality research (Osecká & Blatný, 1997). The researchers understand self esteem as a construct that is able to explain many psychological and social phenomena such as social status, interpersonal relationships, employment, and employment affiliation etc. (Trzesniewski, Moffitt, Poulton et al., 2006). The measurement of self esteem by means of self report tools has brought new topics into debate such as validity issues, dimensionality of self esteem, etc. There are several measures used in self esteem evaluation. For example, the Coopersmith Self Esteem Inventory (CSEI), which assesses the attitude toward oneself in general, as well as in specific contexts – peers, parents, school, and personal interests. It was originally designed to be used with children, drawing on items from scales that were previously used by Carl Rogers (Coopersmith, 1981). The Tennessee Self Concept Scale (TSCS) consists of 100 items measuring self worth in individuals 12 years old and above (Fitts, 1965). Inventories rarely used include the Janis-Field Feelings of Inadequacy Scale (JF-FIS) (Janis & Field, 1959) or the Self Esteem Scale of the Jackson Personality Inventory (SEJPI). However, the Rosenberg Self Esteem Scale (RSES) is the most reported measure of self esteem in the literature (Schmitt & Allik, 2005; Martin, Thompson, Chan et al., 2006; Halama & Bieščad, 2006; Vermillion, 2007). In

the case of RSES, self esteem is referred to as global self esteem (GSE).

The connotations of self esteem and other personality characteristics such as neuroticism, extraversion, or depression were scrutinized across age cohorts (Trzesniewski, Moffitt, Poulton et al., 2006; Pullman & Allik, 2000; Corwyn, 2000). Studies focusing on the population of seniors are scarce. Thus, knowledge about self esteem in seniors is lacking, although psychological traits have been reported to be associated with health beliefs. There is evidence in the literature that seniors who participate in motor activities (walking, doing exercises) are more likely to perceive their health problems, such as back and joint pain or respiration difficulties etc., as a natural part of their lives. They do not perceive their health problems as being limiting in their daily and free time activities (McAuley et al., 2005). Though it has not been proven that motor activity improves the quality of life, higher satisfaction with one's health status is observed in seniors participating in some type of motor activity. Other authors suggested that involvement in non specific motor activity is associated with higher levels of self esteem in adolescents and adults (Ruuskanen & Ruoppila, 1995; McAuley & Blissmer, 2000).

The level of self esteem in those seniors who participate in regular motor activities has not been reported on so far. Therefore, in study no. 1, we examined the level of self esteem in seniors who attend regular motor activity (exercise). We looked at differences between men and women.

Up to the present time, the process of ageing has been explored from different perspectives. Both biological and social aspects have been discussed. Some au-

thors examine the stability of the GSE score throughout the life span with regard to functional health (Reitzes & Mutran, 2006) or life style (Greenberger et al., 2003; Trzesniewski, 2006). In general, the experts agree on the stability of self esteem as a part of an individual's personality characteristics. However, the research on the psychological differences in ageing is lacking.

Therefore, in our follow up study we aimed at the potential differences in self esteem in seniors and the younger population of adolescents from the age perspective.

Maintenance of an active life in seniors has become a highlighted issue recently because of its economic and social implications. Currently, more than 650 million people world wide are 60 years old or older. According to demographic estimates the number may increase up to one billion by the year 2025 (WHO, 2008). In 2007, more than two million people over 60 lived in the Czech Republic according to the Czech Statistical Institute (CSU, 2007).

Particularly in developed countries, supporting programs have been started in order to improve the health and social situation of seniors. The most important determinants of the success of these programs are associated with the knowledge of the attitudes of seniors towards themselves as persons and towards their life style. The population of seniors is often denoted as being an economic burden for the society. This perspective has been disclaimed by the WHO as one of the myths concerning the population of seniors. Seniors often complain about feeling useless and discarded from social life. However, they often perceive themselves as being still productive and able to contribute, which is related to psychosocial characteristics including self esteem (WHO, 2008).

OBJECTIVES

The objective of the two studies conducted in our follow up design was to examine the level of self esteem in seniors who practice an active life style, including participation in regular motor activities as compared to their younger aged cohorts. In study no. 1, the level of global self esteem was measured with respect to gender within a sample of 106 seniors. In the follow up study, the levels of self esteem were compared between a sample of seniors and a sample of adolescents.

With this paper we aim to contribute a baseline for further research focusing on self esteem in seniors who do not participate in motor activities and lead rather a non active lifestyle. We presume that self esteem would be higher in seniors leading an active life style.

This finding may support the development of strategies empowering the population of seniors in their social environment by means of active life style promotion and maintenance.

METHODS

The Rosenberg Self Esteem Scale (RSES)

The Rosenberg Self Esteem Scale (Rosenberg, 1965) monitors global self esteem (GSE) as one factor. The studies used the Czech version of this scale that was validated in 1994 by M. Blatný and L. Osecká (Blatný & Osecká, 1994; Osecká & Blatný, 1997). The questionnaire is composed of 10 items formulated as statements. The respondents assess their personal agreement with the statements on the Likert type scale ranging from 1 = not valid for me at all to 4 = completely valid for me (in the English original the score ranges from 1 = strongly disagree to 4 = strongly agree). Five items are formulated positively, the other five are formulated negatively. The scores of negative items were coded reversely. Administration of questionnaires required approximately 10 minutes. All participants provided informed consent prior to the study.

Study 1

Global self esteem in seniors – a gender perspective

A sample of 106 subjects participated in study no. 1 (75 females and 31 males). The mean age of the participants was 70.08 (SD 6.56). The mean age was 68.20 (SD 5.69) in women and 74.62 (SD 6.33) in men. The participants were members of the Czech sport organization Sokol. The questionnaire was administered from February through May 2008.

Follow up study

Global self esteem – the age perspective

For the purposes of the follow up study (self esteem from the age perspective), the comparison data of a group of 102 adolescents were obtained from a sample of secondary school students (41 women, 61 men). The mean age of the students was 17.15 (SD = .68). The mean age was 16.98 (SD = .56) in women and 17.28 (SD = .52) in men.

First, the data were analyzed by means of descriptive statistics. The statistical properties of the data substantiated the use of the non parametric Kolmogorov-Smirnov test to assess the GSE score with regard to gender differences within a sample of seniors. Second, analysis of variance (ANOVA) was employed to assess the differences between the group of seniors and adolescents using the NCSS 2007 (Hintze, 2007).

RESULTS

The obtained data were analyzed first by means of descriptive statistics. The statistical properties of the data substantiated the use of the non parametric Kolmogorov-Smirnov test to assess the GSE score with regard to gender differences within a sample of seniors. Second, analysis of variance (ANOVA) was employed to assess the differences between the group of seniors and adolescents using the NCSS 2007 (Hintze, 2007).

Study 1

Global self esteem in seniors – a gender perspective

The objective of study no. 1 was to examine the level of GSE from the gender perspective in a sample of 106 seniors. We presumed that there are no significant differences in the GSE score between men and women in our sample of seniors.

However, the results suggest that the GSE scores as well as SD differed in men and women (TABLE 1,

Fig. 1). The median GSE score was 32 in men and 30 in women. The mean GSE score was 32.00 (SD 3.12) in men and 31.15 (SD 4.91) in women. To assess whether the variances in men and women differed significantly we ran the Modified-Levene Equal-Variance test. The results suggested unequal variances and thus the non parametric Kolmogorov-Smirnov test for ordinal scaling for different distributions was run in order to assess the significance of the differences. The results showed that the GSE score is significantly higher in men than in women ($p = .008$).

TABLE 1

Global self esteem score in seniors – descriptive statistics

	N	Mean age (SD)	Median GSE score	Mean GSE score (SD)
Men	31	74.6 (6.33)	32	32 (3.12)
Women	75	68.2 (5.69)	30	30.14 (4.91)

TABLE 2

Analysis of variance in GSE score in a sample of seniors and adolescents with regard to gender

Source	DF	Sum of squares	Mean square	F-ratio	Probability level
Term					
A: seniors – adolescents	1	232.7506	232.7506	9.44	.002411*
B: gender	1	123.9753	123.9753	5.03	.026001*
AB	1	2.183701	2.183701	.09	.766290
S	204	5028.924	24.65159		
Total (adjusted)	207	5307.077			
Total	208				

Legend:

* Term significant at $\alpha = .05$.

TABLE 3

Tukey-Kramer multiple comparison test

Response: GSE Score			
Term A: Age			
Term B: Gender			
Group	Count	Mean	Different from groups
Adolescents	102	28.83147	Seniors
Seniors	106	31.07333	Adolescents
Women	116	29.13431	Men
Men	92	30.77049	Women

Legend:

$\alpha = .05$,

Error Term = S (AB),

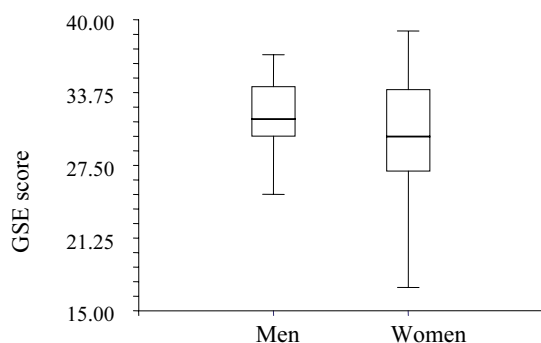
DF = 204,

MSE = 24.65159,

q = 2.7884.

Fig. 1

Global self esteem score variances

**Follow up study****Global self esteem – the age perspective**

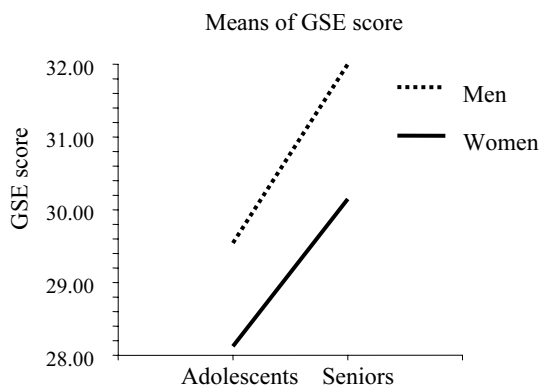
The objective of the follow up study was to compare the levels of GSE between samples of seniors and adolescents.

In study no. 1 the significant differences of the GSE score related to gender were found in a sample of seniors. In order to check for the gender related differences in the study, we employed a two way analysis of variance that enabled us to detect potential GSE score differences in data obtained from seniors and adolescents with respect to gender and age. To assess the significance of the difference, four groups were recognized with respect to gender and age – adolescent men, adolescent women, senior men and senior women. In accordance with our presumption, the results suggested that there was a significant difference in the GSE score between seniors and adolescents. Seniors scored significantly higher than adolescents (mean GSE in seniors = 31.07, mean GSE in adolescents = 28.83, $F = 9.44$, $p = .002$). A significant difference in the GSE score was also found with regard to gender at $\alpha = .05$ ($F = 5.03$, $p = .026$). The differences associated with interaction of the two factors – age and gender were non significant at $\alpha = .05$. The results are summarized in TABLE 2. Simultaneously, the Tukey-Kramer multiple comparison test confirmed the significance of the differences. The test compares the means of every treatment to the means of every other treatment, and identifies where the difference between two means is greater than the standard error would be expected to allow (Hintze, 2007). The test is referred to as conservative and thus it identifies only true significance (TABLE 3).

In Fig. 2, the upper dashed line indicates the situation in men with regard to age. It is apparent that the GSE score is higher in seniors. The lower line indicates the GSE score in women with regard to age. The linear trend is similar to the trend described in men. At the same time, the trend of the GSE score in men and women within samples is almost identical in both samples,

Fig. 2

GSE score in seniors and adolescents with regard to gender



therefore the difference resulting from gender and age interaction was recognized as being non significant.

GENERAL DISCUSSION

Global self esteem in seniors represents a broad area of psychosocial research that has been underreported. Therefore, two follow up studies on global self esteem (GSE) in seniors participating in regular motor activities were conducted. The aim of study no. 1 was to describe self esteem in seniors who follow an active life style including participation in regular motor activities. The aim of the follow up study was to compare self esteem from the point of view of the age perspective between adolescents and seniors.

According to the results, the level of GSE in the whole sample was high according to the standards set by Rosenberg (1965). Next, in study no. 1, we found significant differences between women and men in the senior sample. The results showed that men scored higher in GSE than women. However, the RSES scale was reported to show a lower ability to distinguish between individuals with high GSE scores (Halama & Bieščad, 2006). Therefore, these findings need to be interpreted deliberately for practical use in order to avoid overestimation of differences although the results showed statistical significance. Furthermore, findings of gender related differences in a GSE score are not in line with reported studies where men and women did not differ in their GSE scores (Pullman & Allik, 2000). On the other hand, the cited studies were focused on age differences.

Participation in motor activities may be the distinguishing variable. Further research in a larger sample size is needed. If supported by the results of the research, the gender related differences may be explained by an individualistic and collectivistic paradigm (Bhawuk &

Triandis, 1996). According to this paradigm, men tend to be more individualistic in terms of the distinguishing self from others which is manifested in their higher self esteem in contrast to women who tend to be more collectivistic and their self scheme is not that prominent.

The stability of the GSE score throughout the life span is an issue often discussed in the literature with regard to life style, health beliefs, employment etc. (Greenberger, Chuansheng, Dmitrieva et al., 2003; Trzesniewski, Moffitt, & Poulton, 2006). In general, the experts agree on the stability of self esteem as a part of individual personality characteristics. In the follow up study, we compared two samples of physically active individuals from two age groups – seniors and adolescents. Our results suggest that the level of the GSE score was significantly higher in seniors than in adolescents. This finding may be explained by a potential underestimation of positively worded items and an overestimation of negatively worded items in adolescents. The question is, whether the estimation of adolescents is less realistic than the estimation of seniors or vice versa. At the same time, there were no significant gender related differences across the two groups. An additional measure of other personal characteristics, e.g. the big five inventory – NEO-5, is needed for advanced interpretation (Aluja et al., 2007; Pullmann & Allik, 2000). The correlations of the level of self esteem with other personality traits were the focus of studies in samples from the younger population. For example Fick (1999) found a significant correlation between high scores in self esteem and extraversion and conscientiousness in adolescents 14–17 years of age. Accordingly, low self esteem correlated significantly with high neuroticism and anxiety. According to Fick (1999) neuroticism and conscientiousness are reliable predictors of self esteem. The implication of such findings may be relevant with respect to the psychosocial profile of older people with regard to quality of their life.

CONCLUSION

Global self esteem is a theoretical construct representing one of the psychological characteristics of the personality. The exploration of its aspects in seniors is limited. In this paper, we have reported on the results of two follow up studies concerning these issues. In study no. 1, we examined the level of global self esteem with respect to gender perspective within a sample of 106 seniors (75 women and 31 men, mean age 70.08, SD = 6.56). In the follow up study, we compared the levels of global self esteem in a sample of seniors and a sample of adolescents. The Rosenberg Self Esteem Scale was used to measure the level of global self esteem. For the purposes of follow up study, the comparison data were

obtained from a sample of 102 secondary school students (adolescents), 41 women, 61 men (mean age 17.15, SD = .68).

The results of study no. 1 suggest that there are significant differences between men and women seniors in terms of their GSE scores. However, the GSE score was high in both men and women. We may propose that the environment and the life style of the respondents could be the determinants of the level of GSE. A deliberate interpretation of these findings is needed in regard to the real significance of these differences.

In the follow up study, a significantly different global self esteem score was found between the group of adolescents and seniors. Seniors were more likely to report higher GSE scores than adolescents. The difference may be explained by underreporting in adolescents who may be more critical towards themselves. The differences in understanding the items might have also helped cause the discrepancies.

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GLOBÁLNÍ SEBEHODNOCENÍ U SKUPINY ČESKÝCH SENIORŮ A ADOLESCENTŮ (Souhrn anglického textu)

Globální sebehodnocení (GSH) je teoretický konstrukt, který představuje jednu z psychologických charakteristik osobnosti. Aspekty GSH dosud nejsou dostatečně prostudovány. V tomto článku předkládáme výsledky dvou na sebe navazujících studií, které se těmto aspektům věnují. Ve studii 1 jsme sledovali úroveň GSH vzhledem k pohlaví v souboru seniorů (75 žen, 31 mužů, průměrný věk 70,08 let, SD = 6056). Jednalo se o aktivní seniory, kteří se pravidelně účastnili organizovaných pohybových aktivit v rámci TJ Sokol na území České republiky. V navazující studii jsme srovnali úroveň GSH tohoto souboru seniorů a souboru adolescentů, studentů středních škol (41 žen, 61 mužů, průměrný věk 17,15 let, SD = 0,68). Pro měření úrovně GSH jsme použili Rosenbergovu škálu sebehodnocení.

Výsledky studie 1 ukázaly, že ve výzkumném souboru seniorů existují statisticky významné rozdíly v úrovni GSH mezi ženami a muži. Hodnoty však byly vysoké u mužů i u žen. Z výsledků navazující studie vyplývá, že z hlediska úrovně GSH existují mezi soubory adolescentů a seniorů statisticky významné rozdíly. Zjistili jsme, že senioři vykazují vyšší hodnoty GSH častěji než adolescenti.

Klíčová slova: senioři, sebehodnocení, pohybová aktivita.

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Education and previous work experience

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First-line publications

During her graduate studies she has attended and presented papers related to both, the emotions and motor control as well as active life style, on several domestic as well as international scientific meetings as the main author (e.g. the 15th International WCPT Congress: World Physical Therapy, Vancouver 2007; the 10th European Congress of Psychology, Prague 2007; the 12th Congress of Sport Psychology, Halkidiki 2007; the 5th International Scientific Conference on Kinesiology, Zagreb 2008; the International Student Conference UNICA Student Conference, Warsaw 2008).
