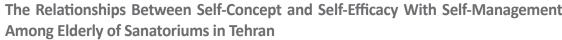


# **Research Paper**





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#### **ABSTRACT**

Objectives The present study determined the correlation of self-concept and self-efficacy with self-management among elderly in the sanatoriums in Tehran in 2015.

Methods & Materials This descriptive-analytic research, conducted in a cross-sectional study, enrolled 217 elderlies from the sanatoriums of Tehran in 2015 via a simple random sampling method. Three tools including Rogers self-concept scale, general self-efficacy scale (GSE-10), and self-management ability scale (SMAS-30) were utilized to measure the variables. After sampling and gathering the questionnaires, collected data were entered into SPSS and analyzed using the analytical tests such as Kolmogorov–Smirnov test, Pearson's test, and regression.

Results The mean of self-concept, self-efficacy, and self-management were 8.25±1.47, 17.68±4.00, and 59.69±11.59, respectively. Other findings indicated significant relationships of self-concept and self-efficacy with self-management (P<0.05). Multiple regression analysis showed that self-concept and selfefficacy could predict about 14% of self-management.

Conclusion The elderly in the sanatoriums of Tehran had a low self-concept, self-efficacy, and self-management. Thus, it could be concluded that by improving the self-concept and self-efficacy of elderly, we might witness an increase in self-management.

# Key words:

Self-concept, Selfefficacy, Self-management, Elderly, Sanatorium

### **Extended Abstract**

# 1. Objectives

ne of the major concerns of the aging period is the reduction in self-management abilities required by the individuals for managing themselves [1]. If the elderly self-management abilities are

challenged, they would feel like living creatures with-

out discretion and lack of decision-making power, and their management and independence in life would be jeopardized. In such a situation, they have to obey the decisions and authority of others contradictory to their willingness [2]. Elderly individuals with low self-management abilities are vulnerable [3]. Currently, there is no study addressing the relationship of self-concept and self-efficacy variables with self-management variable in the elderly. Self-concept is a way of thinking and attitude that a person has about him/herself [4],

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and self-efficacy is the level of confidence is that with which a person shows specific behavior and expects desired results, depending on the particular situation [5]. Therefore, the present study aimed to determine the relationship between self-concept/self-efficacy and self-management.

### 2. Methods and Materials

In this descriptive-analytic and cross-sectional study, the research population included s all elderly residents of nursing homes under the Department of Welfare of Tehran city; the sample cohort comprised of 217 individuals. After receiving the ethics code (IR.USWR. REC.1394.253) from the University of Social Welfare and Rehabilitation Sciences, random sampling was conducted. After obtaining informed consent from all participants, questionnaires were provided to gather the relevant data, which were subsequently entered into SPSS software and analyzed by Kolmogorov-Smirnov, Pearson's correlation, and regression tests. Three questionnaires were used to collect the data: 1. Rogers self-concept: It included two "A" forms (measures the attitude of the individual towards himself) and B form (compares the attitude of an individual to him/herself). Each form included 25 personality traits, the opposites of those attributes were mentioned on the other side. The distance between the two contrasting attributes was scored with a 7-degree scale.

The total score from 0–7 showed a positive self-concept, a score of 7–10 indicated negative self-concept, and a score >10 reflected the neurotic self-concept [6]. The Cronbach's alpha coefficient of this scale in previous studies for "A" form was 0.79 and that for the "B" form was 0.75 [7]. However, in the present study, the coefficient was 0.72 for the "A" form and 0.7 for the "B"; 2. General self-efficacy scale: It included ten items with a minimum and a maximum score of 10 and 40, respectively. A high score on this scale indicated high self-efficacy [8]. The Cronbach's alpha coefficient

of this scale in previous studies were 0.81 [9] and 0.82 [10], while the current study revealed the coefficient value as 0.8; and 3) Self-management ability of the elderly: This scale comprised of thirty items with a minimum and maximum score of 30 and 150, respectively, and a high score indicated high self-management ability. The Cronbach's alpha coefficient of this scale in the previous studies was 0.91 [1] and 0.8 [11], while this study displayed the coefficient value as 0.86.

#### 3. Results

The present cohort comprised of 217 elderly individuals, 60–95 (mean age=78.66±11.78) years; among these, 144 were women, and 73 were men. The mean and standard deviation of self-concept, self-efficacy, and self-management variables were 8.25±1.47,  $17.68\pm4.00$ , and  $59.69\pm11.59$ , respectively. In order to select the appropriate statistical test, the normality of the study variables was investigated using the Kolmogorov-Smirnov test, which demonstrated that all variables had a normal distribution (P<0.05). Pearson's correlation test showed that self-concept (r=-0.179, r=-0.008) and self-efficacy (r=0.361, r=0.001) were correlated with self-management. Furthermore, to assess the explaining power of the predictor variables (selfconcept and self-efficacy), stepwise multiple regression models were put forth and the findings summarized in Table 1.

Table 1 showed that stepwise regression analysis has two steps. In the first step, the self-efficacy variable entered the equation whose correlation coefficient (R) with a dependent variable was 0.361. In this level, the coefficient of determination was R<sup>2</sup>=0.130, and the adjusted coefficient of determination was R<sup>2</sup> (Ad)=0.126. With the introduction of the second variable, i.e. self-concept, R=0.383, R<sup>2</sup>=0.146, and R<sup>2</sup> (Ad)=0.126 were increased. Thus, taken together, based on the R<sup>2</sup> (Ad) (0.138), approximately 14% of the changes in the dependent variable (self-management) were explained

**Table 1.** Stepwise regression results of self-management variable according to self-concept and self-efficacy of the elderly residents in the nursing homes in Tehran

Predictive Variables	В	β	t	R	R²	Moderated R <sup>2</sup>	R <sup>2</sup> Changes	Р
Self-efficacy	1.368	0.361	5.677	0.361	0.130	0.126	0.130	0.000
Self-efficacy	1.296	0.342	5.355	-	-	-	-	0.000
Self-concept	-1.238	-0.128	-2.01	0.383	0.146	0.138	0.016	0.046

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by the two variables: self-efficacy and self-concept. The contribution of self-efficacy and self-concept variables with respect to the self-management variable was evaluated based on the standard beta coefficient (B); B of self-efficacy (1.296%) was higher than that of selfconcept (-1.238%). Based on the non-standard beta coefficient (β), for a unit of change in the standard deviation of self-efficacy and self-concept, about 0.342 and 0.128 units of altered standard deviation would occur in the self-management variable, respectively. Therefore, the role and contribution of self-efficacy variable in explaining the self-management is more than the self-concept variable. Furthermore, the stepwise multiple regression was applied to statistically determine the interaction of the combination of determinants of selfmanagement. As a result, self-efficacy with P<0.01,  $\beta$ =0.342 and self-concept with P<0.05,  $\beta$ =-0.128 were found to be the predictors of self-management in the elderly residents at the nursing home.

## 4. Conclusion

The present study was conducted to determine the relationship between self-concept/self-efficacy and self-management of the elderly residents at the nursing homes in Tehran in 2015. The results showed that self-concept, self-efficacy, and self-management in the investigated population were unfavorable. In addition, self-concept and self-efficacy of the elderly were significantly correlated with their self-management. Moreover, self-concept and self-efficacy explained about 14% of self-management. Nevertheless, the present study had some limitation. First, it used the correlation method. Therefore, the identified relationships cannot be assumed to be causal. Second, this study was exclusively for the elderly residents of nursing homes and cannot be generalized to the whole population. Given the weak self-concept, low self-efficacy, and undesirable self-management in the majority of the elderlies examined as part of the elderly mental health issues, additional attention is required for psychological issues and influencing factors in the nursing home. Thus, psychological assessments and consulting services are recommended in order to raise the level of mental health of the elderly.

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### **Conflict of Interest**

The authors declared no conflicts of interest.

