

**Babes-Bolyai University**

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**Doctoral School Evidence-based assessment and psychological  
interventions**

## **SUMMARY OF PhD THESIS**

**Socio – emotional and cognitive features in aging**

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**CLUJ-NAPOCA**

**2013**

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## **1. Relevance of research**

Increasing life expectancy has been the defining demographic process during the second half of the last century and is now in constant evolution (Anonymous, 2003). The most important aspect of this phenomenon is the fact that we witness an unexpectedly high increase in the number of older people as highlights epidemiological studies. This will create radical changes in the distribution of age in the coming decades. In 2050, it is expected that in the world, the number of adults aged over 60 years will be 2 billion from 605 million in 2000. Moreover, the elderly will be more numerous even than the children (aged between 0-14 years) for the first time in history. Changing this demographic picture will affect substantially all sectors of society, from health care and fiscal institutions, to families. Also, the rate of disabilities and age-related diseases will increase as the population ages (Glatt et al., 2007). These declines, especially when climbing to dementia, can have a dramatic impact on the independence and safety of activities of daily life and overall quality of life of the elderly (Smiley - Oyen et al., 2008). This aspect of the inevitable damage that occur with age, together with the social costs are important reasons for channeling attention on identifying and understanding the factors that support successful aging (eg. elderly independence, efficiency and their health) (Bourne et al., 2007; Fillit et al., 2002; Zunzunegui et al., 2003; Wilson et al., 2002).

Successful aging as a general construct is not a single entity and will not be promoted only by focusing on a particular aspect of the life of people. Maintaining cognitive vitality is just a marker of successful aging. A well-being of the elderly can also be taken as an important indicator of this phenomenon.

Social support is one of the many protective factors that contribute to variations in the aging process (Hendrie et al., 2006). People who have effective social networks, have a reduced risk of mortality (Seeman, 1996), better physical health (Vaillant et al., 1998), reduced risk of dementia (Fratiglioni et al., 2000, 2004) and protection against loss of functional capacity in old age (Hagberg & Nordbeck, 2002).

National Institutes of Health (NIH) through the Cognitive and Emotional Health Project (Gow et al., 2007) recently established the following: "identification of demographic,

biological and psychosocial factors that help people maintain or improve their cognitive and emotional health as they get older, is becoming a major public health objective" (Hendrie et al., 2006, p. 13).

Taking into account all these data from studies in the literature, an important issue is on the one hand to clarify the links between variables relevant to the aging process and on the other hand, an equally important aspect is to determine the mechanisms behind these associations.

## **2. Research objectives and general methodology**

This thesis aims to address a number of theoretical, methodological and practical objectives related to socio-emotional and cognitive features in aging. More specifically, our goal is to clarify the existing links between all these variables and more than that, to establish the causal direction of these associations to highlight the existing mechanisms. Based on all these results, we can then suggest various interventions in order to promote healthy aging, by reducing or offsetting damage that may occur in the elderly population. Moreover, the whole research approach will seek to clarify these issues, highlighting the age differences that occur in the relations between the variables of interest included in the studies and mechanisms of change.

### **2.1. Theoretical objectives**

The first theoretical objective of this thesis is represented by the study of the relationship between emotion regulation and cognitive errors, irrationality, depression, well-being and quality of life in the elderly and adults, in order to clarify the relationship between these concepts in both age groups.

Another objective of the paper is the investigation of the moderating role of age, in the relationship between emotion regulation and cognitive errors, irrationality, depression, well-being and quality of life in the elderly and adults.

The study of the relationship between social support, emotional regulation, cognitive errors, irrationality, depression, well-being and quality of life in the elderly and adults, is the third theoretical objective.

The fourth and final theoretical objective of this thesis is to investigate the role of social support in the relationship between emotion regulation and cognitive errors, irrationality, depression, well-being and quality of life in the elderly and adults, in order to also highlight possible mechanisms of behind the joint variables of interest.

In this regard, Studies 2 and 3 of this thesis details the research efforts aimed at achieving the theoretical objectives stated above.

## **2.2. Methodological objectives**

An important methodological objective of this thesis concerns the analysis of the effectiveness of psychosocial interventions focused on improvements in cognitive skills, in problematic behaviors, in mood and quality of life, both by estimating the effect size of these interventions and by estimating the effect sizes of the effects of these interventions separately, for each type of outcome.

In this regard, Study 1 consists of a quantitative meta-analysis aims at synthesizing studies conducted on psychosocial interventions in dementia, in terms of their effects sizes.

## **2.3. Practical objectives**

If previous studies aim to investigate the relationships between emotion regulation and important variables in aging process, latest research (Study 4) of this thesis aims to study autobiographical memory as episodic memory, because it is a source of emotional self-regulation for both the elderly and adults.

In this respect, Study 4 has the following objectives: (1) investigation of differences in the positivity and specificity of autobiographical memory in the elderly group and the

group of adults and (2) the analysis of the distinct impact of positivity of autobiographical memory and specificity of autobiographical memory on the frequency, intensity and duration of the well-being, in the group of elderly and adult group.

### **3. The main results**

Summarizing the most important results obtained in this thesis, we can say that:

- Overall, according to the results, we can say that there are differences between the elderly and adults when it comes to relations between the variables of interest to the aging process and mechanisms behind the associations identified. Moreover, it can be seen from the results obtained by comparison, the fact that in the elderly, emotion regulation is an important predictor for all variables studied, unlike adults, where we found links to some variables but not all. We can therefore say that as we get older, better emotional regulation capacity will be associated with a number of positive effects beneficial to the cognitive, social and emotional plan.
- Unlike to existing studies in the literature so far, which only highlights the relationship between emotion regulation and some of the aging variables of interest, in this paper we have put together the main variables of interest to the aging process, in order to provide an overview of the relationship between all of them and to identify the various mechanisms of these associations.
- The results show the effectiveness of psychosocial interventions in dementia that have as outcome "cognitive skills", pointing out that those who receive as type of intervention, cognitive stimulation, will record a better performance than the control group (Study 1).
- In the elderly, age had a moderating force on the relationship between emotion regulation and irrationality. We can say therefore, that as we age, as the deficits in emotion regulation are more numerous, the level of irrationality increases. According the other models, age does not seem to have any effect in the



relationship between emotion regulation and other variables of interest, neither in the elderly, nor in the adults group (Study 2).

- It has been shown that social support is a significant mediator of the association between emotion regulation and all the variables of interest (in the elderly), respectively of the association between emotion regulation and well-being and depression (in adults) (Study 3).
- In terms of positivity and specificity of autobiographical memory, between elderly and adults, there were no significant differences. From this point of view, we can't say that there is a positive effect on age-related autobiographical memories when we take into consideration specific types of events, respectively key events in a person's life (turning points). Also, there has been found no statistically significant associations between positivity of autobiographical memory and frequency, intensity and duration of the well-being, or between the specificity of autobiographical memory and the three dimensions of the well-being, neither in the elderly, nor in the adults. We can not say therefore, that positivity and specificity of autobiographical memory are predictors for frequency, intensity and/or duration of the well-being, neither in the elderly, nor in the adults (Study 4). Given the mixed results in the literature on this positive effect related to memories of elderly, the present results should not be surprising, especially since seniors who participated in this study had a mild cognitive impairment. This inconsistency of results related to memories, further emphasizes the importance of identifying the variables or conditions that influence this age-related positive effect in memory.

All the results of this thesis are extremely important, because once clarified the relationships between all these variables and more than that, being identified the mechanisms in the relationships between these variables, in the future may be suggested various interventions, in order to promote successful aging, preventing, reducing or offsetting some damage occurring at the cognitive and physical level, with age.

*Keywords:* psychosocial interventions, dementia, emotional regulation, cognitive errors, irrationality, quality of life, well-being, depression, social support, positivity effect, specificity, autobiographical memory, adults, aging.