INTERNAL DETERMINANTS OF QUALITY OF LIFE OF PEOPLE OVER 50 YO IN POLAND – PRELIMINARY RESEARCH

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Abstract:
This paper presents on the base of literature review the preliminary results of research of internal determinants of Quality of Life in 50+ yo Polish citizens group. Acceptable fitting the data path model explaining general Quality of Life (QoL) measured using WHO QoL BREF questionnaire as dependent variable is presented with goodness of fit indices. The model suggests that key to higher Quality of Life is high Self-acceptance (explaining about 70% of QoL variability). All other researched internal factors such as: poor coping strategies (negatively connected), good relations and life attitudes as well as self-assessed physical health (all positively connected) are influencing Quality of Life indirectly through the Self-acceptance. In the paper are provided also separate regression models explaining each of general Quality of Life sub-dimensions describing such domains as: physical health, psychological bodily image, social relationships and environment. Investigated independent variables mostly of psychological nature allowed to explain between 21% and 47% of dependent variable variability.

Keywords: quality of life, model, internal determinants, 50+ yo group

1. INTRODUCTION

According to WHOQoL Group definition, *quality of life is defined as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to goals, expectations, standards and concerns* (1994a). It means that quality of life (QoL) should be treated as subjective evaluation of life connected with a cultural, social and environmental context. Due to the way of understanding QoL as "perceived", the felt effects of health, care/treatment or life conditions are important, not the factual one.

WHOQoL Group defines four domain of quality of life:
1. Somatic – physical health activities of daily living (includes dependence on medical aids, energy, mobility, pain, quality of sleep and work capacity)
2. Psychological – bodily image and appearance (negative and positive feelings and self-esteem, religion or other beliefs, cognitive functioning)
3. Social – relationships (includes close relationships, friendship, level of social support, sexual activity)
4. Environmental – (such factors as: socioeconomic status, safety, social care, environment, both home and physical, possibility to learning and acquiring new informations and skills, and possibility to recreation) (1994a).

Nowadays quality of life is one of the most widely discussed areas. Much of literature is concentrated on life quality in illnesses, health problems, health care or stressful situations, while only a few – on healthy people.

Depending on the specificity of illness, different results of investigations are given. Such factors as age, education, professional activity, marital status and financial situation affect the assessment of quality of life, while sex and the place of residence do not in most of previous research. Moreover, socioeconomic status and demographics often affect QoL indirectly (see e.g.: Navi et.al. 2010; Kent et.al., 2013; Szynkiewicz et.al., 2013). The role of the way perceiving different life situations (due to QoL definition) connected with self-esteem pointed e.g. Cox et.al (2012). Quality of life on polish population was investigated e.g. by Jaracz, Wolowicka, & Kalfoss, M. (1999) and Jaracz, Kalfoss, Górna, Bączyk (2006).

Literature points the work activity as important factor which can protect from the depression and allows see one's life and health in better way in follow-up study (Di Gessa, Grundy 2014). Possibility of perceiving themselves as people who are able to work give them sense of competence. They are able to earn money, so they can afford to create their life conditions and evaluate them as good. Quality of life in this context is dependent from self-competence, and therefore, from self-acceptance. Feeling of being strong person is one of the most important things (Grundy, 2006). The promotion through the whole life course of healthy lifestyles, different coping strategies, building strong families, engagement in different active interest and work, according to Grundy, will allow to develop some kid of psychological reserves for being stronger in later life. Due to the fact, that some difficult situation which can determine the sense of the quality of life, cannot be modified (as aging, worse socioeconomic status, physical and/or mental diseases etc.), interventions to develop one's sense of competence should be hold.

In Europe demographic change and general aging of society are common. Especially in Central and Eastern Europe older people have to cope with – in their own assessment - great changes related with economic transition processes from planned economy to market one. The increasing number of elderly people in this countries will need more support at home, and will use more different healthcare services. The way to efficient care is integrated and people-centered care in hospitals, homes and in the community. Innovative treatments will enable the older people to live longer in better health and with a better quality of life (Garcia, Gaceta 2013). McKevith (2005) pointed the role of healthy diet as a factor preventing some physical diseases, which can decreased the quality of life.

2. METHOD

The main aim of this preliminary research was examining what the quality of life depends on. Considering the literature study shown above, the stated questions were:

1. Are demographic factors significant for older people in Poland? (socioeconomic status is highly diversified, possibility of medical care is limited, and the living is rather expensive in Poland nowadays)
2. Which of internal factors are significant for level of quality of life?

To realise the aim of presented research it was decided to examine 150 people in the 50+ years old group. The QoL (dependent variable) was measured by questionnaire developed for WHO, brief version was used. WHO QoL BREF is divided into four domains (physical health, psychological, social relationships and environment) and gives a quality of life profile (1996). Due to actual knowledge about relationship among QoL and different life situations, as well as psychological states, as model independent variables were chosen:

- Self-esteem (and both esteem of the whole one's life and general well-being), measured by MSEI - The Multidimensional Self-Esteem Inventory - O'Brien & Epstein (1988), in polish adaptation (Fecenec 2008)
- Life attitudes – according to Reker, in polish version adapted by Klamut
- Close relations (especially the way of attachment) according to Bowlby theory of attachment and patterns of attachment described by Ainsworth (1978)
- Coping with stress strategies – measured by COPE-Brief (Carver 1997)
- Some personality factors
- Some demographic factors (e.g. stress, illness, general physical health, socioeconomic status, number of children, living with others, place of living).

3. RESULTS

Different statistical analysis made on the data collected pointed that QoL has no relation with most of demographic factors. Such variables as place of living (e.g village or big city), perceived socioeconomic status, marital status, living alone or with somebody else, number of children or occupational activity have no or very little correlation with any of QoL domains. It suggests, that not objective facts affects the sense of quality of life, but rather perception of them. This findings are consistent with WHO QoL Group's understating of the life quality.

3.1. Quality of life domains characteristics

The first step in data examining was checking the frequency distribution for every domain of quality of life. This scale has standardized scoring between 4-20. The table 1 shows the descriptive statistics, and figures 1a, b, c, d – histograms of every domain with Gaussian curves.

Table 1: Frequency characteristics of QoL domains

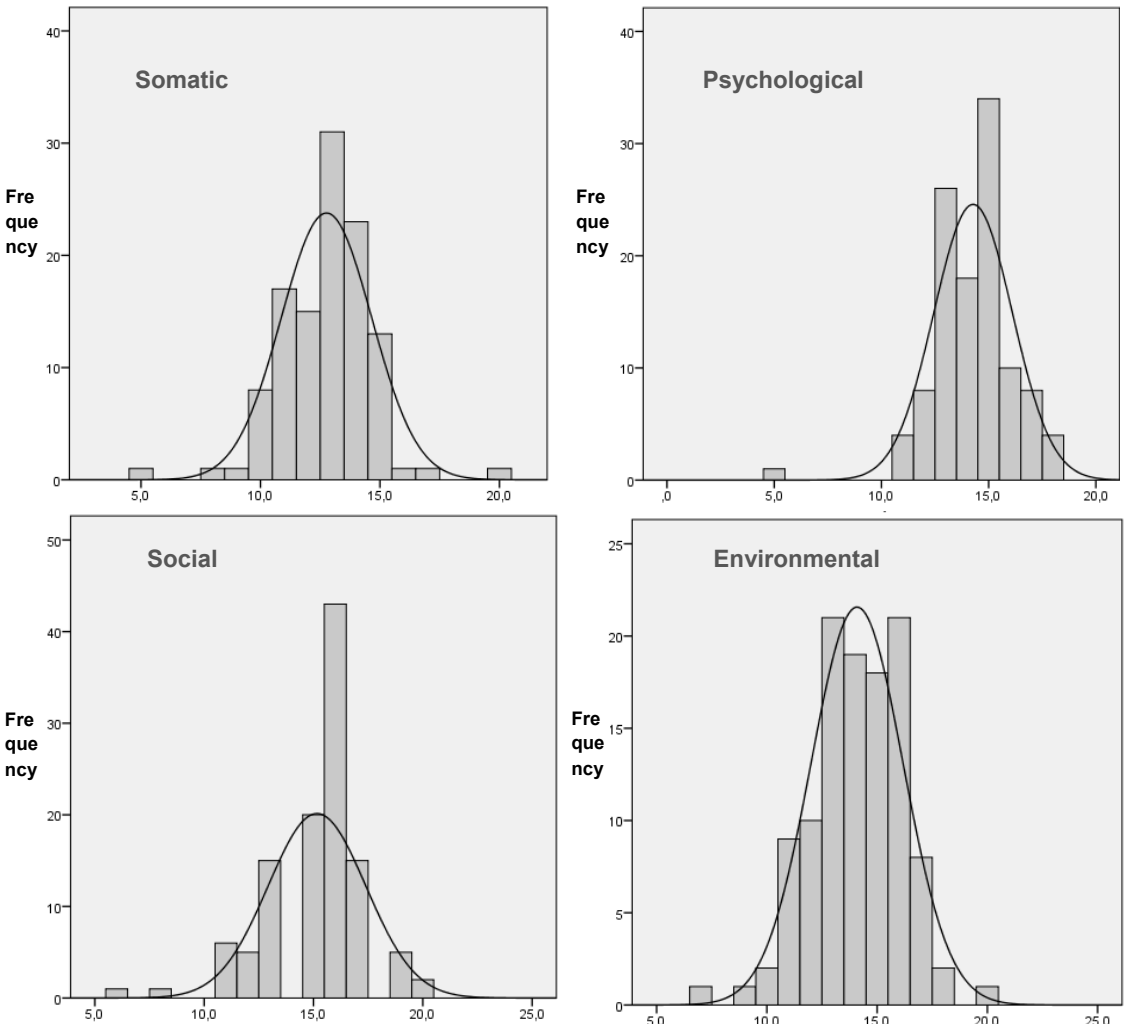
Statistic	WHOQoL domains			
	Somatic	Psychological	Social	Environmental
N	113	113	113	113
Mean	12,76	14,27	15,15	14,08
SD	1,89	1,83	2,23	2,08
Variance	3,59	3,36	5,01	4,36
Skewness	-0,289	-0,963	-1,010	-0,323
Kurtosis	3,142	4,797	2,421	0,548

Source: Own elaboration.

The highest mean is for social domain of quality of life. It shows that despite in some cases rather poor socioeconomic status (reported as "poor" or "rather poor") and for most of examined people – average, it is not the main factor of this domain. People have good relation and system of support (from family and friends) and the most of them still work, so they perceiving themselves as independent. But the standard deviation is the largest in this domain, so it can be concluded that perceiving of social conditions is differentiated and depends on different variables. The lowest mean is for somatic domain,

and it seems be natural. Age of 50+ is the time the first diseases appears and people must learn how to cope with somatic problems. It can decrease the score in this QoL domain.

Figure 1: Histograms of frequencies of the level for four domains of QoL



Source: Own elaboration.

3.2. Models of QoL domains – regression analysis

For further analysis of quality of life domains the regression method was used. Four model was estimated (for each domain). Statistics of Beta, t-tests and level of significance are shown in Table 2.
The first domain is *Somatic.* It is explained by three predictors: trust, emotional unloading and perception of being competence person. These factors allow to cope with different difficulties with everyday living, which are related to some problems with physical health. It is worth to be note, that somatic domain has a lowest mean for the group. It shows that from all specific domain of quality of life the health and coping with health problems is the most difficult for older people.

The characteristic thing is, that this people who declared different diseases which they cope not differ from health people not only in the somatic domain, but also in other domains of QoL. For this model R-squared is 0,215, ANOVA is significant on the $p<0,001$.

Psychological domain's mean is quite high, so we can conclude that examined people are rather glad for their psychological functioning. They have rather positive self-image, only a little problems with cognitive processes, and more positive than negative feelings about themselves. Variables which explain this domain are: esteem of owns life and perception of correct own dietary habits and healthy living. Taking care about themselves gives the sense of trying to make the life better. In the consequences psychological well-being is growing. But people feel that thinking about and controlling

the diet (what sometimes is necessary due to somatic problems) can be difficulty and limits their freedom. Diet's necessity is perceived as the factor decreasing the level of psychological QoL. For this model R-squared is 0,247, and ANOVA is significant on p<0,000 level.

Table 2: Regression models for QoL domains

QoL domain	Model	B	Standard Error	Standaridsed Beta	t	p
somatic	(Constant)	10,698	,879		12,174	,000
	Trust	,294	,117	,244	2,499	,014
	Coping: Emotional unloading	-,696	,272	-,238	-2,560	,012
	Competence	,217	,099	,214	2,193	,031
Psychological	(Constant)	10,766	1,137		9,471	,000
	Life evaluation	,483	,186	,251	2,598	,011
	Healthy living	,483	,135	,495	3,580	,001
	Correct dietary habits	-,092	,043	-,287	-2,134	,036
Social	(Constant)	14,045	1,023		13,723	,000
	Avoidant attachment style	-,299	,087	-,305	-3,422	,001
	Life control	,243	,096	,232	2,532	,013
	Ability to confide	,260	,109	,213	2,388	,019
	Coping: self-blaming	-,631	,276	-,210	-2,286	,025
Environmental	(Constant)	10,888	1,286		8,468	,000
	Life purpose	,391	,077	,429	5,064	,000
	Material status	,809	,271	,252	2,988	,004
	Hostile time	-,207	,085	-,192	-2,428	,017
	Time of being in relation	-,044	,016	-,228	-2,742	,007
	Coping: acceptance	,572	,271	,164	2,115	,037
	Coping: support seeking	-,606	,250	-,199	-2,421	,018
	Occupational activity	,316	,137	,185	2,315	,023

Source: Own elaboration.

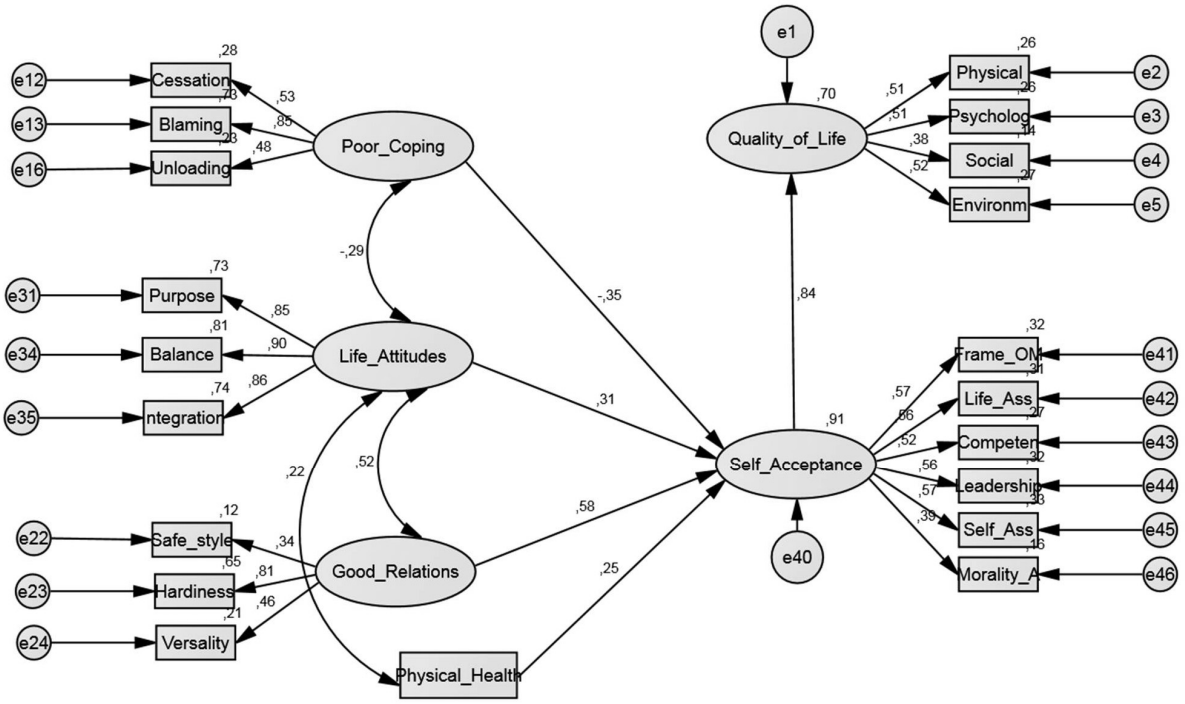
For *Social* QoL domain R-squared is 0,290, ANOVA is significant on p<0,000 level. Social domain is explained by six predictors: low level of avoidant style of attachment, perceived life control, ability to confide and low tendency to blame ourselves. It means that older people are learned to depend on themselves. It gives them the sense of life controlling, because everything what they do is their own decision. Social conditions of Quality of Life, which include close relationships and level of social support (both institutional and private) is perceived as good also for the possibility of talking with others about situation. It gives mainly emotional support. Level of quality of live is higher, if people have lower tendency to blame themselves as coping strategy. It means that realistic evaluating of problem causes helps to evaluate social living conditions in better way. The mean value for this domain is the highest (see table 1). It is worth to note that people of 50 yo were grown in situation of centrally planned economy with inefficient production and distribution of consumer goods – in effect those people remember the empty shelves in stores, they experienced the prolonged surplus of consumer demand comparing to supply.

There are eight predictors important for *environment* domain: purpose of life, evaluate of own material status, perceiving the time as hostile, occupational activity, coping strategies: acceptance of situation and – negatively – support seeking, and time of being in close relation. R-squared is 0,473, and ANOVA significance level is p<0,000. Predictors suggest that different environmental conditions can be perceived as less important, when the person has close relation with somebody, because it gives her possibility to effective coping with stress. Preferred strategies to cope is acceptance. But in the case of this domain, support seeking is negatively connected with environment conditions, because support is understand in this case as often material support. People who have to asked about something what is related to environmental conditions defines this conditions as poor. Purpose of life is rather clearly named, there is no symptoms of the middle of life crisis. It makes people sure, that life is good and with close somebody they can afford the situation. Besides it, the most of examined people are still occupationally active. It is a kind of feedback for them which allows to see themselves as able to achieve their aims independent from external situations.

3.3. Preliminary path model for general Quality of Life

Based on the results described above, the preliminary model was estimated. The main aim of this model was finding such non-socioeconomic factors, which define one's ability to evaluate his life in positive way. The model shown on Fig.2 is fitting the data well, and is characterized by good fit indices.

Figure 2: Preliminary model of QoL antecedents



Note: All path coefficients significant at p<0,05
Main fit indices: chi-square/df=1,667 GFI=0,817 AGFI=0,764 RMSEA=0,077
Source: Own elaboration.

In this model self-acceptance is the only one factor which affects directly the general quality of life. The standardised path coefficient is 0,84, and this factor explains about 70% of the general QoL variation. It suggests, that mainly mental attitudes toward self and world can define the way of life evaluation. It means that for research participants QoL does not depend directly on external conditions, important thing is rather how these condition are perceived and evaluated.

Three variables explain about 91% of self-acceptance variability: poor coping strategies (negatively connected), good relations and life attitudes.
The highest path coefficient is for relation: 0,58. This factor includes such components as:

- Safe style of attachment (a phenomenon that shapes the pattern of how a person makes contact with others, in safe style person has trust to partner and feels safely, gives and receives much support and comfort
- Hardiness (Oulette), what means active living (job, creativity, many good relations with other people), control (sense of ability to effect one's life, health and social situations) and challenge (stress situations are not perceiving as a threat, but rather as possibility to growth. These traits make people more immune and healthier
- Versatility of self (Patricia Linville) understood as different personality traits allowing better adapt to stressful life events

The second factor is poor coping with stress. It is negatively connected with self-acceptance (standardised path coefficient equal -0,35). Poor coping is composed of such strategies as cessation of activity (with belief in one's incompetence), blaming yourself and emotion unloading. These strategies are not constructive and do not bring any problem solution. In presented model it means

that less frequently using of non-adaptive styles makes people more effective in coping and gives them belief in possibility to effect on their life, what increases positive self-esteem.

The last factor are attitudes toward life, composed of purposefulness, integration of beliefs and balance of different attitudes. The standardised path coefficient to self-acceptance is in this case positive and equal 0,31.

In presented model there is only one factor which has not only psychological nature – esteem of health well-being (standardised path coefficient equal 0,25).

4. CONCLUSIONS

Based on results is possible to claim the older people in Poland evaluate quality of their lives independently from external conditions. Life quality depends mainly on attitudes which define the way of perception of situations. People with positive self-acceptance have tendencies to see rather chances then the threats in life events.

Important for quality of life is emotional support received from close person (and generally safe attachment style). It allows to discuss different situations, find the best solution and effectively cope. The highest level for social domain suggest that older people assess general life conditions well, because they are still occupational active, they have some interests and friends. It makes the life worthy and interesting, they have not symptoms of mid-life crisis.

The problem is with somatic domain. Besides the general mean score in this domain is still average, it is the lowest level of four QoL domains found in this research. It can be concluded, that for Polish people age of about 50 yo is the time the first chronic diseases appear. Difficult in this case in the inner conviction that the diet must be changed in some situation, but, from the other hand, people evaluated their living habits as healthy. It is important (McKevith, 2005) to identify dietary patterns which can gave protection against chronic disease. The challenges should be make in two fields: first, as a need to improve the diet for older adults; and second, to encourage other age groups to adapt their diet, because most chronic diseases begin in earlier life. In some cases worse health is connected with the state of natural environment causing health problems because of pollution.

Further analyses and studies are needed to better explain dependencies between described factors influencing particular QoL domains as well as QoL as a whole for Polish citizens over 50 yo.

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