# **Analysis of Resilience and its Relationships with Psychological Factors during Successful Aging**

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Abstract— The objective of this research was to verify the relationship between resilience, successful aging, wisdom, quality of life, basic psychological needs perception, cognition and depression. methodological design was quantitative and transversal. 161 elderly people of both sexes living in the city of Ivoti / Brazil participated. The instruments used were the Resilience Scale, Wisdom Scale, Geriatric Depression Scale, and Inventory of Basic Psychological Needs Perceptions for the Elderly, MMSE, and Whogol-Old. Spearman's correlation analysis identified the relationship between resilience and quality of life variables, basic psychological needs and depression. In the linear regression analysis, we found a model in which the increase of resilience is associated to the personal competence, autonomy, wisdom, cognitive performance and past, present and future activities. We conclude that the resilience association with psychological aspects in the onset of old age is an important protective factor for the maintenance of successful aging.

Keywords—Basic psychological needs, Cognition, Depression, Quality of life, Resilience.

## I. INTRODUCTION

It is common that in the period of old age many changes occur in both the social and biological as in the psychological scopes. However, in addition to diseases, limitations and declines, there are also positive aspects and potentialities manifested in a subjective way among the elderly. To promote healthy aging, it is necessary to promote protective factors since they are strong influencers of the ability to adapt to risk factors. This adaptation ability is called resilience. Therefore, this

definition converges to a sum of social and psychic nature processes that allow healthy development even in unfavorable contexts. Considering resilience as a process, it is not possible that it is an attribute of the person or a characteristic acquired throughout development [1].

Thus, in order to preserve the mental health of people in general, it is necessary to prevent risk factors and strengthen protective factors. In this way, the presence of adverse situations is related to the concept of resilience, since it is a situation where the person is exposed to stress, but is able to overcome and find strategies to deal with the situation in a positive way, while conserving [2].

Is important to consider this aspect in the study as the population studied, there is a high chance that the person will be exposed to risk situations for a long time. Thus, the elderly can maintain a positive sense of well-being, even under conditions of functional limitations and disabilities, because like any human being, the elderly activate compensatory mechanisms to deal with these losses.

Therefore, it is important that, with the aging process, the resilience capacity of the elderly is increased, so that adaptive behavior can be maintained, due to the fact that in old age the probability of unpleasant events related to physical health is greater, to the well-being and to the life of loved ones. Knowing what factors are protective elements we will be able to stimulate them, favoring the resilience and consequently the successful aging.

Considering this reality, the living conditions of the elderly have been researched in several scientific areas, mainly after elaboration of the Statute of the

Elderly [3]. However, many fields remain open. Meanwhile, demographic research has been proving, more and more, the growth of the number of elderly in the world and in Brazil. Over the next 50 years, for the first time in history, there will be more people in the world over 60 than under the age of 15. In this way, the aging phenomenon is no longer only problem of developed countries. This topic is very relevant in the 21st century, because it has consequences for all sectors of human life, at the world level [4].

The resilience theme has been considered a challenge for some scholars and is still unknown to many others. Therefore, the two themes, aging and resilience require investigations that take into account, above all, our reality.

Beyond resilience, wisdom is one of the most important and necessary dimensions for the proper qualitative understanding of human behavior, implies a balanced relationship between the cognitive, affective and emotional components. Wisdom appears as the supreme end of human development, especially for old age and can be one of the protective elements capable of fostering resilience and successful aging.

However, it is important to consider the risk factors involved in the aging process and for this, it is also important to deepen our understanding of depression, as they are capable of hindering successful aging. Regarding the age range chosen for this study, it can be stated that among mental disorders, depression is a more frequent disease of emotional suffering in the elderly, and this fact can affect the quality of their life, therefore constituting a problem of public health [5]. In addition, depression is also being considered as a risk factor for dementia processes. Consequently, it can be a life-threatening element, especially of those who have a chronic-degenerative or incapacitating illness. Thus, the presence of depression can be a factor that hinders or even prevents the elderly from achieving a successful aging.

A considerable volume of studies has been devoted to the understanding of the successful aging process and its biological and psychosocial components [6]. Among the many aspects of successful aging, cognitive aging and its biological / psychological bases are one of the primary focuses of research, given the need to identify and differentiate between normal and pathological changes and, if possible, identify targets for intervention in the sense of Prevent or mitigate the effects of pathologies such as vascular dementias and Alzheimer's [7].

Human aging is understood in this study as a phenomenon that is part of a process of development, growth, learning, maturation and human improvement [8]. That is why the elderly need positive attitudes in their

lives, so that they can have a successful aging. Thus, the elderly can expand the understanding of themselves, perceiving their qualities, respecting their limits, accepting oneself as a human being and re-meeting with themselves. In this sense, old age can be characterized as a promising period for investigating factors and processes of resilience and vulnerability.

This study aims to verify the relationship between resilience and the variables of successful aging, quality of life, perception of basic psychological needs, wisdom, cognition and depression in the elderly over 60 years living in the city of Ivoti / Brazil.

#### II. METHOD

The present study has a quantitative and cross-sectional methodological design, and the evaluations were done in a single moment, therefore, there was no follow-up period of the individuals. The research was carried out in the municipality of Ivoti in partnership with the Municipal Council of the Elderly of the municipality and the Secretariat of Health and Social Assistance. This work is part of the larger research entitled Parameters analysis of cognition, body composition, functional capacity, oral health, psychological characteristics and genetic and biochemical markers of response to physiological stress: a study of successful aging in the elderly over 60 years.

The population of this study was composed of elderly residents in the Municipality of Ivoti. The municipality has a population estimated in 2013 of 21,460 people, an area of 63,161 km<sup>2</sup> and a population density of 314.71 inhabitants per km<sup>2</sup>. The municipality is within the metropolitan region of the State of Rio Grande do Sul, has a predominantly German ethnic identity and a high rate of human development. The total resident population of the elderly over 60 years in the municipality is 1959 persons. In the 60-69 age group, there were 1,165 people, of which 517 were men (421 from urban and 96 from rural areas) and 648 were women (603 from urban and 45 from rural). The population aged over 70 is 794 people, 314 men (284 urban and 29 rural) and 480 women (408 urban and 73 rural) (Brazilian Institute of Geography and Statistics, 2013).

The sample of this study was selected for convenience in five health centers of the city. All the elderly registered were invited to participate and the sample was composed of 161 elderly people in the age group between 60 and 79 years, of both sexes. The mean age was 67.45 years with a standard deviation of 5.57 years. The age groups were divided into two classifications: 60 to 69 years (66%) and 70 to 79 years (34%). In this sample we had 29.9% of males and 70.1% of females identifying the presence of feminization of old age. Inclusion criteria were over 60 years of age, living in

the municipality of Ivoti, not being institutionalized or hospitalized, having mental and health conditions to have independence and autonomy to participate in the study. The exclusion criteria were: to present dementia processes, fragility syndrome, to be hospitalized or institutionalized.

In this study, we evaluated the variables of resilience, successful aging strategies, wisdom, and perception of basic psychological needs, cognitive performance, life quality and depression. The instruments that evaluated the variables described in this study were:

1. Resilience Scale developed by Wagnild and Young [9], used to measure resilience assessed by levels of positive psychosocial adaptation to major life events [10]. The scale is composed of 24 Likert-type items that range from 1 (totally disagree) to 7 (totally agree). Scores range from 24 to 168 and high values indicate high resilience. This scale was adapted by Pesce et al. [10] and considered

2. Wisdom Scale, developed by Alves [11], provides information about how people conceive the wisdom and values they associate with the wise person; Approaches values associated with intelligence, personality and transcendence. Three direct questions related to three factors are associated with the scale, so that more information can be obtained and the existence of significant relations between them can be verified. The scale ranges from 1 (totally at odds) to 5 (fully agree);

relevant for Brazilian culture;

- 3. Geriatric Depression Scale, Brazilian version of GDS-15, offers valid measures for the detection of major depressive episode in the elderly. The scale is scored according to the presence of depressive symptoms, with a cut-off point of 6 symptoms (normal  $\leq$  5, mild depression  $\geq$  6 and  $\leq$  10 symptoms,> 10 severe depression). It presents an easy and quick application, with questions that ask for yes or no, answers according to the perception of how it felt in relation to the last two weeks preceding the evaluation [12,13];
- 4. Inventory of Perceptions of Basic Psychological Needs for the Elderly is understood as the satisfaction perceived by the individual, considering the Autonomy, Relationship and Competence dimensions, during a given situation. In this inventory, we find statements that describe perceptions of the elderly about their daily routine. It is a 15-item scale, answered by a bidirectional likert scale, graded in 5 points, ranging from "strongly disagree" (1) to "strongly agree" (5) [14]. This instrument was adapted from the Inventory of Perception of Basic Psychological Needs for Athletes validated in the study of the doctoral thesis of Barbosa [14] and later validated by the same researcher for elderly population;
- 5. SOC Inventory (Selection, Optimization, Compensation) explains the strategies to achieve a

successful aging, developed by Baltes et al. [15]. In its original version it contains 48 items, however in this study the reduced version was used, which was described by [16] as more favorable. This version consists of 12 items that evaluate the use of SOC strategies by the elderly. Each item consists of two statements one describing the behavior reflecting the SOC and another offering a reasonable but not SOC option;

- 6. Mini Mental State Examination (MMSE) is a cognitive screening test widely used in the evaluation of the elderly and was developed by Folstein, Folstein, and McHugh [17] and translated by Bertolucci, Brucki, Campacci, and Juliano [18]. It consists of several questions typically grouped into seven categories, each one designed to evaluate specific cognitive functions: orientation for time (5 points), orientation for place (5 points), record of three words (3 points), attention and calculation (5 points), recall of three words (3 points), language (8 points) and visual constructive capacity (1 point). The items are evaluated by a score ranging from 1 to 5 points, reaching a maximum of 30 points. Schooling was pointed out by Bertolucci et al. [18], Juva, Mäkelä, Erkinjuntti, Solkava, Ylikoski, Valvanne and Tilvis [19] and Almeida and Almeida [13] as a determinant factor for the evaluation presenting differentiated cut points according to the number of study years. The cut-off points were based on the criteria of Brucki, Nitrini, Caramelli, Bertolucci, and Okamoto [20];
- 7. Whoqol-Old aims to measure the individual's satisfaction with their life and their perception of the influence that illnesses have on their lives. This instrument contains 24 Likert-type items from 1 to 5, divided into six facets. Each facet is composed by four items, assuming a standardized score of 0 to 120. The domains are: Autonomy; Functioning of the senses; Past, present and future activities; Social participation; Death and death; and intimacy [21].

The project was approved by the Research Ethics Committee of the University under number 747.080. The Participants signed a free and informed consent form in accordance with the resolution of the National Health Council of the Ministry of Health that deals with research involving human beings.

After classification and data collection, descriptive, comparative, correlation and multiple stepwise linear regression studies were performed. The correlation study was performed using the Spearman Correlation Coefficient with acceptance level 0,05. For the comparative study of means the Mann Whitney tests were used, with acceptance level also 0,05. For the statistical study, the Statistical Package for the Social Sciences - SPSS - for Windows, v. 22.0.

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# III. RESULTS

The psychological variables of resilience, wisdom, depression, basic psychological needs, successful aging as well as quality of life were not significantly different when compared to the variables gender and to the age group divided between 60 and 69 years and between 70 and 79 years (Mann Whitney test). Only the cognitive performance variable, evaluated by the MMSE, presented a significant difference (p = 0.045) in relation to the gender variable, demonstrating that men presented better cognitive performance (Table 1).

Table.1: Participants' characterization

Table.1: Participants' characterization										
	60	- 69	70 - 7	9 years	Total	p				
	ye	ars	n	=55	n=16					
	n=	106			1					
•	M	F	M	F						
	n=2	n=8	n=1	n=38						
	5	1	7							
Resilie	142,	142,	136,	144,8	142,5	0,974*				
	9	3	1±3	$\pm 14,2$	1	0,597*				
	$\pm 10$	±12,	0		±14,8	*				
		9			9					
Wisdo	4,27	4,27	3,9	4,2	4,30	0,709*				
	$\pm 0,4$	$\pm 0,3$	±0,	±0,4	±	0,134*				
	7	8	7		0,55	*				
MMS	25,6	24,6	23,7	22,7	24,27	0,080*				
E	7	2	±4,	±4,2	$\pm 3,61$	0,045*				
	$\pm 2,3$	$\pm 3,3$	4			*				
		0								
GDS-	0,21	0,20	0,20	0,1	2,91	0,450*				
15	$\pm 0,1$	$\pm 0,1$	±0,	$\pm 0,1$	$\pm 2,36$	0,771*				
		6	1			*				
Basic	67,4	67,4	63,2	67,8	67,34	0,073*				
psych	0	8	±8,	±6,5	$\pm 6,81$	0,410*				
ol.nee	±4,7	±6,5	2			*				
ds		4								
SOC	7,68	7,53	7,4	7,1	7,59	0,352*				
	$\pm 2,8$	$\pm 2,2$	±2,	±2,1	$\pm 2,24$	0,130*				
		1	2			*				
Qualit	74,8	94,5	73,2	74,7	74,74	0,435*				
y of	7	6	±14	±9,8	±10,9	0,893*				
life	±12	±10,			8	*				
		2								
* C	*n of aga group									

<sup>\*</sup>p of age group

In the general group of participants in our study, we found in Spearman's correlation analysis a significant positive correlation between resilience and quality of life variables (rho = -0.475, p = 0.000) and basic psychological needs (rho = 0.534;p = 0.000). We also identified a negative correlation between resilience and depression (rho = -0.279; p = 0.000), showing that older people who present more resilient conditions have a

higher perception of quality of life, less depression symptoms, consider the importance of autonomy, relationships and personal competence during old age.

For the analysis of stepwise multiple linear regression, resilience was tested as a dependent variable. Initially, the following independent variables entered the regression model: depression, quality of life (sensory abilities, autonomy, past, present and future activities, social participation, death and dying, intimacy), wisdom (intelligence, personality, transcendence, Happiness, and religious practice), cognitive performance, basic psychological needs for the elderly (autonomy, relationships, personal competence) and SOC (selection losses, selection, elective optimization compensation).

After analysis of the collinearities and adjustments of the stepwise multiple linear regression model, the following independent variables remained in the final model (Table 2): personal competence factor of the basic psychological need, autonomy and past, present and future activities factors of the quality of life, wisdom and cognitive performance (MMSE). The determination coefficient was  $R^2=0.729$ .

Table.2: Multiple linear regression analysis for the dependent resilience variable

			Stand				
	Unstand. Coef.		Coef.	Coef.		Collinearity Statistics	
		Std.				Toler	
Model	В	error	Beta	t	Sig.		VIF
Constan	20,48	6,810		3,008	,00		
t	2				3		
Persona	1,753	,136	,627	12,85	,00	,730	1,369
1				4	0		
compet.							
Auton.	1,143	,337	,179	3,386	,00	,620	1,613
					1		
Wisdo	,238	,078	,143	3,038	,00	,780	1,282
m					3		
Past,	,765	,302	,138	2,537	,01	,589	1,697
present,					2		
future							
activitie							
S							
MMSE	2,737	1,255	-,092	-	,03	,977	1,023
				2,180	1		

Considering the dependent variable resilience within the two age groups from 60 to 69 years and from 70 to 79 years (Table 3), there is a  $R^2=0.653$  and  $R^2=0.838$ . The predictors for the model of participants in the

<sup>\*\*</sup> p of gender

60-69 age group are: psychological need for personal competence, autonomy factor of quality of life, depression (GDS-15) and intelligence wisdom. In the model of older people, 70 to 79 years old, we identified the predictors of psychological need for personal competence, quality of life autonomy factor, and strategies for selection, optimization and compensation (SOC).

Table.3: Multiple linear regression analysis for the dependent variable resilience in the age groups of 60 to

69 and 70 to 79 years									
				Stan					
				d.			Collin	nearit	
		Unstand.		Coef			y		
		Co	ef.	•			Statistics		
			Std.						
	Model	В	error	Beta	t	Sig.	Tol.	VIF	
	Consta	49,2	9,83		5,01	,00			
	nt	8	6		1	0			
	Person	1,45	,168	,568	8,66	,00	,792	1,26	
Age	al	8			3	0		3	
Ü	Comp								
	et.								
	Auton.	1,30	,352	,231	3,71	,00	,876	1,14	
		8			1	0		2	
	Depres	-	4,84	-	-	,00	,815	1,22	
	•	13,0	1	,175	2,70	8		7	
60-	Intelli	3,31	1,60	,132	2,06	,04	,840	1,19	
69	g.	0	0		9	1		0	
year	wisdo								
S	m								
	Consta	6,78	8,94		,758	,45			
	nt	2	6			2			
	Person	2,42	,192	,776	12,6	,00	,840	1,19	
	al	4			2	0		1	
	Comp								
70-	et.								
79	Auton.	,074	,018	,248	4,06	,00	,854	1,17	
year					5	0		1	
S	SOC	,978	,480	,117	2,03	,04	,957	1,04	
					7	7		5	

The coefficient of determination of  $R^2=0.885$  and of  $R^2=0.669$ , respectively, was obtained by analyzing the multiple linear regression of the dependent resilience variable in relation to the male and female sex study participants (Table 4). For the male analysis, we had the psychological need predictors for personal competence and relationship, as well as life quality. For the female group, the psychological need predictors for personal competence, the quality of life autonomy factor,

and the selection, optimization and compensation strategies (SOC) were part of the model.

Table 4: Multiple linear regression analysis for the dependent variable resilience in the male and female

				Stan				
				d				
		Uns	stand.	Coef			Colli	nearit
		C	oef.	٠			y Stat	istics
			Std.					
	Model	В	error	Beta	t	Sig.	Tol.	VIF
	Constan	2,7	9,729		,279	,782		
	t	1						
	Persona	1,5	,187	,618	8,52	,000	,579	1,72
	1	9			5			8
	Compet							
	Relatio	2,1	,455	,315	4,82	,000	,712	1,40
	ns	9			3			4
	Life	5,9	2,238	,179	2,67	,011	,675	1,48
71211	Quality	7			0			1
į.	Constan	24,	7,841		3,06	,003		
	t	0			3			
	Persona	1,9	,166	,664	12,0	,000	,945	1,05
	1	9			3			8
)	Comp.							
Amma I	Auton.	1,7	,325	,292	5,28	,000	,944	1,05
,		1			6			9
	SOC	1,0	,327	,179	3,32	,001	,993	1,00
		8	,	•	4	,	,	7

The elderly participants in our study in order to develop resilience need to stimulate personal competence, relationships, and quality of life. For the elderly be resilient, they had to develop personal competence as well. Regarding quality of life, the elderly need only the autonomy factor and use the strategies of selection, optimization and compensation that enable a successful aging process. Being, therefore, resilience in women related to successful aging strategies.

## IV. DISCUSSION

Brazil, as a developing country, faces new challenges in the social area, as the rapidly ageing of the population. Once people live longer, a new field of interest opens up in studies that seek to understand the aging process, which should serve as a basis for public policies seeking an advanced age with life quality. In this context the lifespan meta-theory of lifelong development has emerged as one of the most relevant in the search for and understanding of successful aging. This approach indicates that, in order to achieve successful aging,

individuals need to seek the balance between the gains and losses arising from this process and, for that, they must use internal mechanisms called selection, optimization and compensation (SOC). This fact was identified in our study in the age group of 70 to 79 years and in the women.

Although we did not identify in our sample differences in relation to the variables studied in relation to sex or age, except in relation to the cognitive performance that was shown to be higher in men, we can observe that the variables when associated to resilience show a significant result.

Papalia and Feldman [22] explain that older people show considerable plasticity (modifiability) in cognitive performance and may benefit from training. Some aspects of memory appear to be almost as effective in older adults as in younger ones, but other aspects (notably the ability to operate memory and the ability to recall specific events or newly acquired information) are often less efficient, Problems with coding, storage and retrieval. Baltes [23] proposes a dual process model: the mechanics of intelligence often decline, but the pragmatics of intelligence (practical thinking, knowledge and specialized skills and wisdom) can continue to grow.

In the correlation analysis, we identified a relation between the increase of resilience capacity and the positive perception of the quality of life and the basic psychological needs, as well as the reduction of the symptoms of depression.

Alaphilippe and Bailly [24] and Vilela [25] describe that the elderly are not prepared to face this period of life and end up confronted with life boredom. Lack of occupation, especially in the case of men, is one of the main reasons for the onset of depression symptoms, with tendencies to develop hypochondriacal concerns and masked depressions associated with feelings of sadness, helplessness and hopelessness. This picture of depression can progress to a vegetative lifestyle, considered by the authors as a social death, until biological death, or anticipated by suicide. Studies have shown that women are more affected by symptoms of depression and anxiety than men [26]. In Brazil, the latest National Health Survey [27] shows a higher prevalence of depression in women (10.9%) compared to men (3.9%). One way to counterbalance depressive and anxiety symptoms is through self-pity, because with it there is the understanding that suffering (error, failure, pain, inadequacy) is part of the shared human experience. Selfpity in women is related to self-esteem, self-efficacy and socio-demographic aspects [28].

Although the literature indicates differentiated conditions for aging in general, we can note that in the sample of this study, the relationship of resilience with other variables within the context of successful aging in the same way as approached by Baltes [23]. The results demonstrate that coping with the stressful events typical of the aging process has represented a suitable condition for the development of resilience within a context of satisfactory perception of life and concomitant reduction of the symptoms of depression.

Koller et al. [29] report that resilience reveals how people live their lives, since resilience is a strategy that facilitates development and expands the possibilities of a successful quality-of-life aging.

When thinking about the aging process, it is very common that the expected losses that come with age, together with the difficulties associated with them, are referred in first place. However, considering that the aging process is currently irreversible, it must always be taken into account that the most important is how the elderly manages to deal with the losses related to old age, in order to maintain their functional capacity and quality adequate to levels of life. This aspect is strongly related to the way the elderly person perceives their life and with the subjective characteristics related to an aging with quality of life [30]. In this way, the association of resilience with the variables identified in the studied population regarding personal competence, autonomy, wisdom, as well as the recall of past activities and the accomplishment of present activities and the planning of future activities and the cognitive performance as factors are justified Essential for aging to be characterized as successful.

In the present study, the quality of life facet past, present and future activities was identified as a predictor of resilience. It is known that regardless of the age group in which the individual is, during his development, the environment and habits developed throughout life play a preponderant role; When we refer to the elderly, we can not separate them from their social context and life history [21].

The personal competence, autonomy, absence of depression and the wisdom of intelligence as elements necessary for the manifestation of resilience were identified for the participants in the age group of 60 to 69 years. In older people, from 70 to 79 years old, the association of resilience appears again with personal competence and autonomy. As a differential in relation to the younger age group we find the strategies of selection, optimization and compensation (SOC) that define the successful aging process.

In a study carried out by Camargo, Contarello, Wachelke, Morais and Piccolo [31], the results presented a panorama that indicated the association of several variables, including social ones and configurations of representational thinking about what was perceived as

aging. Some variables, such as sex and age group, were contextualized in cultural conditions which were associated with representational products that explained and gave meaning to the challenges and new phenomena that people had to deal with in everyday life, adapting to practical demands. The same process occurred with the present study, where depending on the age range the need to be or not resilient was modified.

Our study found that for men develop resilience and achieve successful aging, it is necessary a good perception of life quality and the basic psychological needs for personal competence and relationship. Women also demonstrate that the development of resilience is associated with personal competence, but instead of the relationship they demonstrate the importance of autonomy and, in return for the perception of quality of life, point to successful aging strategies.

This difference can occur because older women, regardless of social class, tend to attend spaces to remain active as elderly groups, recreational associations, which allows them to affirm their participation, independence and autonomy to manage their lives; women are still more involved than men are by social factors [32]. Women in our sample have always had the family and social interpersonal relationship as a principle, unlike men who retire when they need to look for new relationships in order to maintain their capacity for resilience. However, autonomy tends to occupy a prominent role for women in old age, as they manage to become more independent and autonomous through age and especially widowhood, defining their resilience through the exercise of autonomy. Autonomy is a characteristic exercised by men from the youth, not interfering in the development of resilience.

Considering both age groups (60 to 69 years and 70 to 79 years) and the male and female elderly, we identified that the basic psychological need for personal competence is constant, and is therefore a fundamental element for the development of resilience in people of the study. Quality of life factors were also evidenced in the different age groups and in both sexes.

The absence of depression proves to be important only for the elderly in the age group of 60 to 69 years, as well as the wisdom of intelligence. But successful aging strategies were more specific for women and for the 70-79 age group.

Laranjeira [33] points out that successful aging is measured not only by the absence of problems, but by indicators of subjective well-being, such as satisfaction with life, happiness, morality, contentment, quality of life perceived or other negatively related measures such as depression and anxiety.

It can be seen that injuries of all kinds can occur with the age advancement; the deaths (of the spouse, of relatives, of friends) become more and more frequent. Loss of social utility and disease can cause serious disturbances in the elderly. For all these aspects, aging could be considered as a risky context; however, the elderly react in very different ways. Some may develop a behavior classified as resilient, so that normal and expected events of life become a source of expressiveness rather than threats to the continuity of the self [34].

### V. CONCLUSION

From the analysis and discussion of the data obtained in this study, it can be concluded that the resilience variable did not present significant difference when analyzed under the aspect of different age and sex ranges. The studied sample presents, in a general way, great psychological conditions that were evaluated through the strategies of selection, optimization and compensation, the perception of the basic psychological needs, the resilience, the wisdom and the quality of life and the absence of depression.

Since conception, adaptive processes of acquisition, maintenance, transformation, and wear are involved in the psychological and functional structures. In this perspective, development is understood as a continuous, multidimensional and multifactorial process of modifications, influenced by genetic-biological and sociocultural issues, of a normative and non-normative nature, marked by gains and losses and by the interaction between the individual and the culture.

In order to respond to the objective proposed in this study, it was identified that there is an association between resilience and variables of basic psychological needs, quality of life, depression, wisdom and cognitive performance when analyzed in relation to the sample as a whole.

These results demonstrate that the aging process is complex, ranging from biological aging to social aging, which allows each individual to shape psychologically. This adaptation implies the use of new strategies of thinking and problem solving to compensate for losses when resources tend to decrease. The losses suffered during the life span increase with more lived years, as well as the probability of the appearance of diseases, the reduction of the autonomy and even the death.

We concluded that the variable resilience is related to the basic psychological needs, the absence of depression and the quality of life and it is understood that the present work contributes to the understanding of how this specific population, through resilience and quality of life, crosses this life cycle.

Although several analyzes still need to be performed due to the complexity of the variables presented in this study we can trace some research paths. First, the relationship between social, psychological and physical aspects in the successful aging process is clear. Secondly, it should be noted that the group studied presents ideal conditions for the development of successful aging, and therefore can not represent a parameter for the aging of the Brazilian population.

It is considered, therefore, that the resilience during the old age is marked by many intervening variables, besides the fact that the aging is also subjective, sufficient elements so that many studies still need to be conducted so that the functioning of the resilience in the aging process as well explained in its entirety.

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