

QUALITY OF LIFE: AN APPROACH IN THE RURAL COMMUNITIES OF THE CITY OF PARANAGUÁ, PARANÁ, BRAZIL

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ABSTRACT

Quality of life: An approach in the rural communities of the city of Paranaguá, Paraná, Brazil. Society has constantly sought improvements in quality of life in order to meet its needs. The aim of this study was to estimate the quality of life in rural communities in the city of Paranaguá. The tool used in the study was a structured survey, which produced 113 samples in 6 rural communities. The results show that the quality of life in a rural environment follows subjective values and standards. In order to reach a satisfactory index, economic, social and environmental aspects, which are different from those of urban areas, must be taken into account. Quality of life may be found and enjoyed in different forms. These forms includes the satisfaction of living in a particular rural community, having a quiet and peaceful life, well-being, fresh air, nature, along with a substantial form of assistance by the competent bodies for the subsistence of the people. Quality of life is subjective and varies from individual to individual. Some people do not require much to be happy. This assumption is a prerogative of all human beings. Therefore, quality of life can be translated into happiness.

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INTRODUCTION

Today society constantly seeks to improve the quality of life in its daily life. This expectation addresses socioeconomic and environmental aspects that aim to improve the lives of individuals and families in general. This search aims to cure the demands that refer to aspects of basic needs, such as food, housing, sanitation, leisure, accessibility, among others. Given these, other more relevant needs emerge and most of them derives from uncontrollable factors such as security, the lack of access to schools for children, access to free and good quality health services, roads in good condition, among other aspects. Being part of a society is the next step to be achieved until you reach the point of personal and professional self-realization.

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It is worth mentioning that basic needs must be recognized as a priority, so that the others can be supplied and met. The notion of quality of life is based on a multidisciplinary area of expertise, where it involves diverse forms of popular and scientific knowledge. Hence, the concept covers elements of people's daily lives (ALMEIDA, et al. 2012). These needs are subjective and vary from individual to individual, the environment in which one lives directly interferes with the results that can be obtained by variables that are beyond the control of families, and the main result is an increase in the quality of life. It is known that in addition to the basic needs and other more relevant needs, there is still the need for social interaction or a sharing of the achievements or losses of individuals within a society where it is inserted. The quality of life has been sought before it is even defined, where perhaps no concept is older and at the same time more desired in the present day. Thus, the first gesture of man would come from the motivation to improve his and his tribe's quality of life, but only recently that the concept emerged consolidating in the

collective imaginary of men, thus assuming the definition and use of their devices (BUARQUE, 1993). Thus, it is possible to perceive that the human being in general is always in search of happiness, and this is not possible to achieve in a singular way, where there are needs for each human being. Leisure is directly linked to this interaction, because everyday people seek pleasure and personal fulfillment, often collectively or individually. For Santos *et al.* (2002), the quality of life concept refers to several aspects, ranging from the most material, basic needs, to immaterial issues such as security and participation in society. It also involves objective and subjective aspects, in which it refers to the individual perception of the quality of life and well-being, individual and collective aspects. Material aspects refer to basic human needs, such as housing, water supply and health care, all of which encompass physical and infrastructure needs. Individual aspects are related to the economic, personal and family condition, and the collective aspects are associated with basic services and public services (SANTOS *et al.*, 2002).

Such a quest for quality of life starts from the moment that the human being appears to the world, initially promoted through third parties to which we are dependent to some extent of our lives. From the point that people become financially, culturally, and socially independent, one still cannot attain such satisfaction depending solely on one's own will or instinct. This desirable quality of life level will continue in its large portion, coming from third parties and / or external factors. According to Peixoto (1996), in order to have a quality of life principle one must obtain balance, being found in different dimensions of life, such as love, family, work, friendship, money, religion, health, community, leisure and others. Therefore, the author affirms that the quality of life depends on the balance between all the dimensions of life. It may be thought that although we do not strive to achieve the desired standard, what is offered to us by society, family, city public agencies, can be satisfactory, and their singularities or collectivities, taking into account all individual variables and regional cultures. To enjoy these factors and to use what is offered to us during the course of our lives may be relevant so that the human being can live in harmony with society, but at the same time must be in balance with himself and with the universe that surrounds him.

The estimation of quality of life implies the adoption of several biological, psychological and socio-structural criteria. Within this, several elements are indicated as indicators or determinants of an individual's well-being, such as longevity, biological health, mental health, satisfaction, social competence, activity, productivity, social status, income, family circle and informal group relationships (especially the friends network) (NERI, 1993). With this, Neri (1993) points out that knowledge about quality of life reflects in several indicators, that is, it depends on several aspects in order to achieve a satisfactory level of quality. However, it is not yet possible to identify the degree of importance of each criterion and its interaction with society. Minayo *et al.* (2000), classifies the quality of life as "an eminently human notion, which has been approximated to the degree of satisfaction found in family, love, social and environmental life and the existential esthetics itself." With this, based on quality of life, Scarpin *et al.* (2007) states that a city or country cannot be measured by the money that the citizens have, but by health, education and quality in medical services offered. In addition, it is important to emphasize that such measures must be analyzed by quality

and not only by availability. Working conditions, social and personal relations, legal and political rights of citizens must also be known. According to Noll (2000) a common feature of most current approaches to quality of life may be an implicit or explicit conceptualization of quality of life as to the individual and his / her life characteristics and circumstances. Although they have been part of the early notions of the quality of life concept, dimensions of well-being related to the characteristics of society and qualities such as equality, equity, freedom or solidarity can affect the well-being and situation of individuals directly or indirectly, and have been neglected, at least as an empirical measure and research. In contrast, some of the more recent welfare concepts explicitly focus on aspects of the quality of societies, the distribution of well-being, and social relations in societies. For McEwin (1995), "Social indicators are social welfare measures that provide a contemporary view of social conditions and monitor trends in a number of areas of concern over time." For United Nations (1994) social indicators can be defined as statistics that usefully reflect important social conditions and facilitate the evaluation process of these conditions and their evolution. These social indicators can be used to identify social problems and develop priority actions or to evaluate the programs and policies effectiveness.

As noted, there is no single standard on quality of life and a single acceptable tool to measure this estimate. Thus, new models of individual's quality of life measurement are emerging in the scientific environment to address this topic. A recent example of social indicators system is the "European System of Indicators". This system is considered as an instrument to continuously monitor the "social situation" and societal changes in Europe (Noll, 2002 our translation). For Berger-Schmitt and Noll (2000) measurement, dimensions and indicators address different quality of life aspects of each individual, as well as social cohesion and sustainability aspects of an individual, being the two main "quality of society" components. When looking at rural communities, studies are scarce, because unlike individuals living in urban centers, these people have unique concepts in the subject, and their quest for quality of life may be very different in several respects, which are not considered by individuals residing in urban areas. Observing the assumptions, this study aims to estimate the quality of life index of the families in the city of Paranaguá living in rural communities around the National Park Saint-Hilaire/Lange.

MATERIALS AND METHODS

The study was applied in the region surrounding the Saint-Hilaire / Lange National Park, which includes the following communities: Floresta; Taunay / Morro Inglês; Santa Cruz; Quintilha; Maria Luiza and Pereira. According to Brazil (2001), the Saint-Hilaire / Lange Park was created on May 23, 2001 under the Federal Law 10,227, in which art.1º mentions that the creation of the Park was made for the preservation of the ecosystem and the Atlantic Forest found in the area and, mostly, the quality of life of the population. It is located on the coast of Paraná, 100 km from Curitiba, and 40 km from Paranaguá (Figure 1). The Serra da Prata region represents one of the last natural refuges in the region, favoring the survival of highly specialized species, resulting in a high degree of endemism and sheltering several endangered flora and fauna species.



Source: paranaguá.pr.gov.br, (2018)

Figure 1 - General satellite view of the Paranaguá, Parana, Brazil

Table 1. Estimator of the quality of life index (QLI)

INDICATORS	DESCRIPTION	REMARKS				
		0	1	2	3	4
sanitation (water supply + sanitary type) / 2	Water supply		mine, source, etc. manual operation	common well with manual operation	common well with electric pump	Public electric energy Artesian well
	Toilet type	in the woods, in the open air	Outside but annexed to the residence	outside the residence (Wooden outhouse)	mine, source, mechanic operation Inside the residence	
Organicwaste	Organic was tedisposal	throws on the river/land	Burning	bury	Public garbage collection	Recycle
Leisure	how often the family take rest days	No vacation	Sporadic	once/3 years	once/2 years	once/year
Locomotion	Means of transportation	No vehicle	50 bicycleand/orwood en cart	62,5 mortocycleand similar	75 1vehicle (ride orutility) town	100 More than 1 vehicle (ride+utility) In thelocality
Services (access to medical care + education) / 2	Medical care	No access	Remote access			
	Education					
housing (material * state of conservation) + equipment) / 2	acomodation (predominant material)	0	1	2 Metallic	3 wooden/mixed	4 Brickmansory
	acomodation (state of conservation) equipment (sum/2)	0,5 affordable	1 Fair	1,5 Regular	2 Good	2,5 Excellent
SCORES			Gas cooker, Wood-burning stove, Electric mixer, Blender	Efrigerator, television, landline and cell phone	freezer, stereo	computers
	by the indicators presented in percentages where the maximum score corresponds to 100					
	Final: Average scores of the different indicators in percentage / 10					

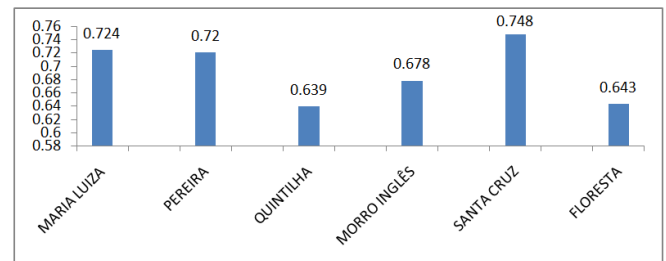
Source: Adapted from Rochadelli (2007)

The vegetation is composed by the Dense Ombrophyllous Forest (Atlantic Forest), which is responsible for the maintenance of the region microclimate, regulating the water regime of the watercourses and guaranteeing the quality of the sources that supply the coast of Paraná (BRASIL, 2001). The tool used in the present study was a structured survey with open and closed questions, where 113 samples were applied, 30 families were interviewed in the Maria Luiza community, 30 in the Pereira community, 15 in the community of Quintilha, 21 in the Taunay/Morro Inglês community, 7 Santa Cruz community and 10 in the Floresta community. The questionnaire was adapted from Rochadelli (2007), which refers to the estimation of the quality of life index (QLI). In this context, the index measured refers to familiar aspects, as well as their daily life, taking into account the conditions of basic sanitation, waste disposal, vehicle availability, family leisure, social integration, health and education, as well as the dimensions of the main residence where these families live (Table 1). In order to estimate the quality of life index (QLI) as a percentage with a maximum score of 100%, the result obtained was divided by 10, thus obtaining the result of the interviewed family, from zero to one. In a second moment, the result obtained, was compared to Maslow's theory of needs, where Maslow's pyramid was subjectively quantified that each need represents a hypothetical value of 0 to 1. Thus, the first basic or physiological need started from 0 to 0.20. The second need for safety starts from 0.21 to 0.4, the third need for association or social, starting at 0.41 to 0.6, the fourth need for status or estimation, begins at 0.61 to 0.80 and finally, the fifth of the needs idealized by Maslow, that of self-realization, which was hypothetically assigned values with variables from 0.81 to 1. This result was later compared to the Human Development Index (HDI) in the city of Paranaguá (0.750), as the respective colonies belong to this region. The data were treated descriptively and presented by means of graph, figure and table, for better visualization of the results, as well as descriptive statistics using sums, as a way to represent the obtained results.

RESULTS AND DISCUSSION

After tabulating all the necessary elements, the QLI of each community was obtained. Thus, the community of Santa Cruz obtained the best estimate of the index among those surveyed with an average of 0.748. At the other end was the Quintilha community with a QLI final average score of 0.639, thus obtaining the lowest average score among the colonies. The other colonies obtained average scores of 0.724 in the Maria Luiza community, 0.720 in the Pereira community, 0.678 in the Taunay / Morro Inglês community and 0.643 in the Floresta community (Graph 1). With application, data collection and observation in locus of the study, it was observed that a greater number of surveys were obtained in the Maria Luiza and Pereira colonies, where they offer a better infrastructure for the subsistence of the families. Maria Luiza community was the only one to count on essential services, such as basic health unit and public school available to the residents. The drinking water source is collected near the community, which in turn has been channeled and distributed in all residences as it is also used for planting and maintenance of subsistence plantations. It is worth mentioning that the supply of the residences was idealized by the existing association of residents and producers and that they jointly care for the maintenance of this service in the community.

The Pereira community does not have the same support, but as it is located near Maria Luiza community, it can use the same services. A certain discontent was observed regarding the infrastructure offered to the interviewed families in the Pereira community. It was reported that in the past was the main and most important immigrant community in the coastal region of the state of Paraná, and is currently used in the vast majority only for housing, since the region is devoid of jobs for the current residents.



Graph 1. Qli average score in rural communities

In the Quintilha community, there are a smaller number of families residing in the region, and the school and health unit of the Maria Luiza community uses them, but the drinking water used by some families comes through payments to the association of Maria Luiza community residents. In the community, some families lived in poorer conditions in relation to the quality and infrastructure of their homes, and lack of better assistance to basic and essential services such as health and education. However, despite obtaining the lowest estimate of the QLI (0.639), the families interviewed did not express their desire to leave the community for different reasons, which, despite of the difficulties faced in everyday life, they are happy to live there. In the Taunay/Morro Inglês community, some of the families interviewed live on land cultivation and others only use it as a residence. There are no schools and health units, and these when necessary, must be used in the Maria Luiza community or in the city of Paranaguá. The source of water comes from artesian wells in the homes themselves. Due to the higher level of income, the quality of housing was improved, resulting in a better estimate of QLI (0.748) of the communities observed. Santa Cruz community was the place with the smallest number of families for the applicability of the questionnaires, being applied in only 7 families. In this community, despite being close to the Taunay/Morro Inglês community, has few residences, but it reached the highest quality of life index (QLI), even though it did not have the essential services, the residents considered other factors, such as tranquility and knowledge of all the dwellings of the community as factors of quality of life. In the Floresta community, which has its administration divided by the cities of Morretes and Paranaguá, it was observed that the site does not have any type of public assistance, due to recent natural disasters, to which families that are still living in the locality receive electric power and potable water through registers with the competent bodies of local government. The families reported that the community was given as condemned for housing. In this way, new families or residences are prohibited from being implanted in the locality. Even in this scenario, the QLI (0.643) achieved in the community meets the standards according to its residents. When asked in the desire to leave the community, the vast majority did not report this desire, even with the difficulties found to live in rural areas. When this desire appears, it is due to new opportunities,

greater employability in larger centers, as a way to be closer to access to basic health services and education. When looking at the family income among the respondents that in 79 of the families, their income comes from the work performed outside the region, diversifying among public employees, business entrepreneurs and performing various functions in private companies in the city of Paranaguá.

Agriculture that was once the main source of the economy in the region, currently only 25 families reported that their income comes from the land exploitation. Cattle raising guarantees the income of 9 families interviewed, the rent of labor is the income of a single family. The conditions of the access roads were also questioned, and most of them consider that they are in good condition, as an answer option for 74 of the interviewees. At the same time, 25 of them feel that the conditions of the roads are regular, whereas 14 consider in bad conditions. For these communities, the quality of life can be summarized in basic services offered by public agencies such as health and education, quality roads, drinking water available in their homes, among other things, tranquility of communities, low crime rate, the peaceful family daily life as the oldest residents lived in the past. Bringing to the scenario that parallels the notions of satisfaction of the needs listed by Maslow, so that the human being can achieve such satisfaction, these are divided between the physiological levels, safety, social, esteem and self-realization. In this context, the results show that the estimated indices of the six rural communities surveyed are between 0.639 and 0.748, paralleling Maslow's theory of needs, it can be said that communities have reached the level of esteem or status, being subjectively determined the value between 0.61 and 0.80. It was observed that community dwellers could achieve the physiological needs, safety needs, social needs and needs for esteem or status, not contemplating the needs of self-realization.

Table 1. Comparative QLI versus Maslow needs

Colônia	QLI	Maslow
Maria luiza	0,724	0,61 ~ 0,80 (estimate)
Pereira	0,720	0,61 ~ 0,80 (estimate)
Quintilha	0,639	0,61 ~ 0,80 (estimate)
Santa cruz	0,678	0,61 ~ 0,80 (estimate)
Morro inglês	0,748	0,61 ~ 0,80 (estimate)
Floresta	0,643	0,61 ~ 0,80 (estimate)
Average	0,685	0,61 ~ 0,80 (estimate)

Source: Authors

In parallel with the Human Development Index (HDI) in the city of Paranaguá (0.750), these communities are below this index, a fact that may be associated with the lack of government services provided in communities, especially health and education, being health Units and municipal schools and the income index of community dwellers. It can be said that these families, as far as applied theories are concerned, show that, on average, families are at a level of reaching self-realization proposed by Maslow, but manage to meet the physiological, social and safety needs, and esteem or status.

Final Considerations

In view of the different means of survival among the rural communities observed, it is remarkable that where there is a more organized infrastructure through its association of residents or by the public power, one obtains a better quality of

life. This quality in the rural environment follows subjective values and standards to which the results show that in order to reach a satisfactory index the economic, social and environmental aspects must be observed differently from the patterns found in the urban environment. Quality of life cannot be validated solely by financial conditions and full governmental assistance. It can be found and enjoyed in different ways to which it can be stated that the satisfaction of living in a particular rural community. The quiet and peaceful life, well-being, clean air, nature, allied with a considerable form of assistance of competent organs for the subsistence of people and thus the quality of life found in rural communities show us results that are similar to those found in urban centers that have a relatively more organized infrastructure when compared to rural communities. Quality of life is subjective and varies from individual to individual, and some people do not need much to be happy. This assumption is a prerogative of all human beings, and the quality of life can be translated into happiness.

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