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**SOCIO-EDUCATIONAL INTERVENTION PROGRAM
TO ACHIEVE A HEALTHY LIFESTYLE**

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Abstract. The objective of this work was to design and apply a socio-educational intervention program for a group of retired teachers over fifty years old in Papantla, Veracruz, Mexico; with the purpose of teaching them, once a week for eight months, a healthy lifestyle and learning to make healthy aging. The research was developed following a quasi-experimental, longitudinal and trend design; to obtain the sample, the sampling technique "Grounded Theory" was used, so that ten people from a population of 36 were self-selected; four research instruments were used to analyze the variables of lifestyle, diet, sedentary lifestyle/activity and level of stress. The results were verified with the application of the questionnaire "Do you have a fantastic lifestyle?" revealing that of the ten people who participated in the health promotion program, nine practice an excellent lifestyle, one a good lifestyle; and, all perform a healthy lifestyle. In this way, it has been shown punctually that older adults have the ability to learn and to carry out a healthy lifestyle to achieve age-appropriate aging, by improving the inadequate habits of their lifestyle and thus increase longevity and improve their quality of life.

Key words: education, aging, lifestyle, health, healthy life.

**PROGRAMA DE INTERVENCIÓN SOCIOEDUCATIVO PARA
LOGRAR UN ESTILO DE VIDA SALUDABLE**

Resumen. El objetivo de este trabajo fue diseñar y aplicar un programa de intervención socioeducativo para un grupo de profesores jubilados mayores de cincuenta años en Papantla, Veracruz, México; con el propósito de enseñarles, una vez a la semana durante ocho meses, un estilo de vida saludable y aprendieran a realizar un envejecimiento sano. Se desarrolló la investigación siguiendo un diseño cuasi experimental, longitudinal y de tendencia; para obtener la muestra se utilizó la técnica de muestreo "Teoría Fundamentada" por lo que se autoseleccionaron diez personas de una población de 36; se utilizaron cuatro instrumentos de investigación para analizar las variables de estilo de vida, dieta, sedentarismo/actividad y nivel de estrés. Se constataron los resultados con la aplicación del cuestionario "¿Tienes un Estilo de Vida Fantástico?" revelando que, de las diez personas que participaron en el programa

de promoción de la salud, nueve practican un estilo de vida excelente, una un buen estilo de vida; y, todos realizan un estilo de vida saludable. De esta forma, se ha demostrado puntualmente que las personas adultas mayores tienen la capacidad de aprender y de realizar un estilo de vida saludable para lograr un envejecimiento adecuado a su edad, al mejorar los hábitos inadecuados de su estilo de vida y así aumentar la longevidad y mejorar su calidad de vida.

Palabras Claves- educación, envejecimiento, estilo de vida, salud, vida saludable.

Introduction

The main reason for carrying out this study was because it has been observed that some people older than 50 years old report noncommunicable diseases with impairment on their quality of life. The World Health Organization (WHO, 2011) in its annual report 2010, states that the percentage of noncommunicable diseases can be prevented by reducing the four behavioral risk factors of smoking, alcoholism, sedentary lifestyles and unhealthy diets. Noncommunicable diseases include chronic degenerative diseases such as cancer, diabetes, hypertension, hypercholesterolemia, obesity, cardiovascular diseases and pulmonary diseases. Thus, syndromes known as chronic degenerative diseases, those that are slow progressing, long lasting, rarely achieve complete healing, and affect old people, can be prevented.

Currently, it is possible to prevent these diseases with the help of health sciences; teaching people how to avoid the four risk factors mentioned. And according to the above, what could be the main problem to be solved so that people can maintain their health at an advanced age? Sartre (1996), existentialist philosopher, affirmed that consciousness is responsible for its relationship with its person. He considered that man's nature is of unlimited and absolute freedom; he said that man is born free and is condemned to be free; that is, thrown into the responsible action of his life, without excuses. For this reason, man is responsible for himself; so, he must consciously take charge of his actions to preserve health and life; and, his responsibility for himself extends to a responsibility toward his person.

Now, existential psychology points to a being in the world; it is of the opinion that, in the evolution of life, man becomes ill because of the absurdity of his own living, because of the lack of reason to make use of his freedom. From this we can deduce that, in some cases, man acquires chronic degenerative diseases because he does not know how to live in freedom, because he does not become aware of his personal conduct in order to carry out a healthy lifestyle. Faced with this situation, it is possible to prevent noncommunicable diseases if people are taught to avoid the inappropriate behaviors of the risk factors mentioned, through an educational program that teaches them a healthy lifestyle. Therefore, the objective of this research was to design and implement an intervention program with a socio-educational approach, once a week for eight months, to a group of retired teachers older than 50 years old, for them to learn to make a healthy lifestyle and thus achieve a healthy, active and functional aging.

The work began with a description of what is understood as a healthy lifestyle, the concept of the psychic structure of a healthy old adult was established and an analysis of the main theories of change and health behavior was made in order to create a lifestyle that helps them to maintain their health at an advanced age. To achieve this, fieldwork was carried out in three methodological phases; in the first phase, with a duration of five months (from June 17 to November 22, 2015), the lifestyle was

investigated using three questionnaires and a scale, which were validated by international organizations; in the second phase (from March 21 to November 18, 2016), the socio-educational intervention program was designed and applied once a week for eight months, with the purpose of modifying the reality detected in the first phase; and, in the third phase (from March 23 to November 25, 2017), the evaluation instruments were applied for the second time to carry out the management analysis, a process that lasted eight months.

A quasi-experimental, longitudinal and trend methodological design was used which allowed us to observe in a natural way the impact of the treatment and the change processes of the observed subjects, collecting data at different times to make inferences about the evolution of the research problem; in addition, the changes that were presented were analyzed. The research that was developed during these three phases, allowed recording the results that demonstrated that it is possible to prevent chronic degenerative diseases in adults over 50 years old, by carrying out a healthy lifestyle. The World Health Organization (WHO, 1998) defines the lifestyle that leads to health as a set of individual lifestyles characterized by identifiable patterns of behavior that can have a profound effect on the health of one individual and on that of others. In other words, lifestyle is a form of vital fulfillment based on identifiable patterns of behavior, determined by the interaction between individual and social characteristics, as well as socio-economic and environmental living conditions. For this reason, man must acquire the scientific knowledge and health techniques that allow him to consciously practice a healthy lifestyle according to his individual characteristics and the social environment in which he lives.

Rubio (2004) defines healthy lifestyles as a collective and social dimension that includes three interrelated aspects: material, sociological and ideological. The material aspect is manifested mainly in food and physical exercise; the social aspect by family relations; and, the ideological is expressed through values and beliefs that determine behaviors and conducts that are emitted in the form of responses and/or more or less structured reactions to the events of life. Likewise, this author points out that the important aspects for improving the lifestyle in relation to health consist of improving the body mass index and overweight, practicing physical exercises of physiological activation, as well as a balanced diet, in addition to avoiding stress, smoking and alcoholism. Therefore, old adults should permanently monitor their diet, overweight, sedentarism, stress, smoking and alcoholism; improve the cultural level and diversify the activities to which they dedicate themselves in their free time.

These concepts served as the basis for this study to investigate the lifestyle of the subjects with the aim of designing and implementing a health education program that would allow them to learn the main characteristics of a healthy diet, the importance of physiological activation and neuromuscular relaxation, as well as to inform them that they should avoid smoking and/or alcoholism. In relation to the mental structure of the healthy old adult, different theories try to explain the process by which an old person who has practiced a healthy lifestyle can enjoy an aging appropriate to their age, by integrating a functional mental structure to manifest a healthy personality at the physical, emotional, mental and spiritual levels. Among these, we find the theory of Vega y Bueno (2000), who expresses that the problem of stability, continuity and personality change after adolescence has been studied and analyzed differently. And by analyzing the scientific framework of the theories of behavior change in health, science shows that these theoretical concepts can be used for the creation, design and

implementation of an educational program for the prevention of health, achieving a positive change of healthy behaviors and conducts in old adults.

In this regard, Choque (2005), says that “there is no theory that dominates health education and health promotion; nor should there be one.” This statement, in relation to the theories of health behaviors and conducts change, is accepted in the field of health education because it takes into account individual differences, social characteristics and the natural environment. In addition, because health problems, behaviors, conducts, populations, cultures and public health contexts are varied and very broad. And among the psychological theories that have been proposed to achieve behavior and conduct changes in health improvement are the theories of persuasion and models of individual behavioral change. These theories, also called behavioral theories, present a framework for understanding human behavior and its determinants, and have been the basis of studies developed by various researchers to promote changes in people's health.

Having said that, in order to carry out the execution and direction of the communication and education actions of the people who must change their behavior in health, there are two theories of behavior change in health, the theories that propose intervention at the individual level and those that act at the group level. For Choque (2005), the theories of individual change start from the point of view that the individual is the most important and immediate reference to favor changes in behaviors and conducts in the population. This opinion is accepted in the scientific field because the individual level is the basic level to initiate the development of behavioral changes and the practice of them in health promotion; but, in addition, they can be part of broader theories, due to the fact that, at group level, communities are integrated by individuals. This is why, in this research, the theories of individual change were applied and the stages of change theory that have to do with the willingness of individuals to change or to attempt to change towards healthy behaviors was used.

Also taken into account was the theory of health beliefs that addresses a person's perceptions of the threat of a health problem and the evaluation of a recommended behavior to prevent or resolve a perceived problem. Likewise, Choque (2005) indicates that it has been structured a model that provides a conceptual framework in which the therapeutic intervention of inadequate health behaviors is framed, making reference to the how, when and why an individual change, a certain unhealthy behavior. DiClemente & Prochaska (1982) cited by López (2004), explain a Trans-Theoretical Model of great relevance in the field of addictions, as a result of their research to study the psychological phenomenon of individual and intentional change of the subject. This model has been explained and analyzed through the stages, the processes of change and the levels of consciousness manifested in change. Therefore, in this work, the stages were first analyzed because they represent the temporal dimension; in other words, it is the time in which people change their behavior and/or conduct; therefore, at the moment of helping a person to make a certain change, the particular stage in which he finds himself at that moment must be considered.

In this way, it is essential to know in which stage the person is in relation to his problem in order to achieve success in behavior change, with the purpose of designing a specific procedure that can support the subject in his adaptation to change. The stages that a person can make to achieve changes in their behavior are precontemplation, contemplation, preparation, action, maintenance and termination.

Choque (2005), also establishes that the stages of change theory have as basic premise the change of behavior that manifests itself through a process to make the

necessary changes. The processes of change that occur most frequently are consciousness raising, self-reevaluation, self-liberation, environmental reevaluation, social liberation, reinforcement management, counter conditioning, dramatic relief, stimulus control, and helping relationships. Therefore, during the process that is being carried out, there are levels of change of consciousness that are manifested in the treatment carried out; which include the psychological problems that are susceptible to change by this means. In addition, Díaz (1983) adds that the levels of change proposed by the Trans-Theoretical Model are organized into five levels where psychotherapeutic evaluations and interventions are located; and, they are: i) symptom/situational problems; ii) current maladaptive cognitions; iii) current interpersonal conflicts; iv) long-term intrapersonal conflicts; and v) family/systems conflicts. This is the reason why it is recommended to start treatment at the first level; but it is also possible to start at the level that the subject considers to be the most important because the person who tries to change alone has the tendency to use it the most; it is the person who offers the least resistance, is the most accessible to the subject's consciousness and can represent the reason for the consultation.

Method

The methodology followed in this research paper corresponds to a quasi-experimental, longitudinal and trend study. The paper was developed on the basis of events that occurred spontaneously, without the direct intervention of the researcher, the observation of facts was made as they are presented in their natural context and were analyzed later; in addition, there were no conditions or stimuli to which the study subjects were exposed. Aspects of situations that occurred naturally at two particular moments were documented, and then the correlation of variables manifested in lifestyle in general was made; in particular: diet, sedentary level and stress level. A longitudinal study was carried out because the purpose of the research was to analyze the changes in the variables established over time and the relationships between them. This activity allowed to collect data in two moments in time; in the first moment a diagnosis and a prognosis were made; and, in the second moment inferences were made about the evolution of the research problem, its causes and its effects with the purpose of knowing the results of the educational intervention in health.

These activities made it possible to collect data, analyze changes in variables over time and the relationships between them, as well as to make inferences regarding the changes obtained, their determinants and their consequences. Likewise, the correlations between the variables of the behaviors manifested by the participants in a determined moment were described; activity focused in the study of reality, trying to describe, to explain and to predict the truth from an approximation to the behaviors of the subjects and through their natural dynamics. It was a longitudinal and trend study because it had the purpose of analyzing the changes that would present the proposed variables through time, and/or the relations between them; with the purpose of collecting the data in specific periods and being able to make the inferences with respect to the change, its determinants and/or consequences.

After the two main moments of the research, the respective correlation was made, taking into account the results obtained in the diagnostic phase and later the changes detected in the second application of the research instruments. Following this procedure, the aspects of what happened were documented and it was possible to know

and analyze the changes made in the lifestyle in general; and, in particular, it was possible to know and analyze the changes in the level of activity/sedentarism and the health risks due to the diet and the level of psychosocial stress. This quasi-experimental, longitudinal and trend methodological design allowed to analyze which was the state of the diverse variables in a determined moment; and, which was the relation between the set of variables in a point in time. The sample was made up by retired persons who regularly attend the monthly meetings of the Union Delegation of retired teachers in Papantla, Veracruz, Mexico.

The decisions made to carry out the sampling reflected the premises elaborated by the researcher, which constitutes a credible, reliable and valid database for addressing the problem. As older adults and in an ambulatory state, a procedure was sought that would allow a sample to be integrated that could be modified without altering the veracity of the study so that some of the subjects could withdraw from the research; but that would also allow other people who wished to participate to be accepted. As this is an investigation of the type of “grounded theory” study in which interviews are carried out and/or the behaviors of people under observation are analyzed; the sample size was integrated with 36 retired teachers who voluntarily participated, of whom ten concluded the study completely. Several people were interviewed and talked with, so events that have been observed in the socio-educational environment were collected and analyzed. They took notes and integrated the various impressions that could be perceived to define the attempt sample subject to the evolution of the suggested inductive process.

Being a small sample, it allowed all participants to permanently practice the interaction between themselves and the group with the enabler in each session. Three factors were taken into account in determining the type of sample. The operational capacity to collect and analyze the data; the possibility of understanding the complexity of the phenomenon to be researched and to understand the nature of the phenomenon to be analyzed. The research strategy allowed emphasizing the participants’ lifestyles, where the researcher took an interactive stand with them, with the idea of building the knowledge of a healthy lifestyle, providing them with scientific knowledge and carrying out the proposed techniques together. A longitudinal method was applied to observe the behavior of two independent variables and four dependent variables; as well as to analyze their incidence and interrelation at two determined moments.

Independent variables of sex and age were analyzed; as well as the dependent variables of the lifestyle, the diet in the diet/nutrition, the sedentary/activity and the level of stress; allowing its manifestation of natural form. The lifestyle variable made it possible to know, through a structured questionnaire, the person’s lifestyle, to elaborate a personal life project and to identify lifestyle improvements after the implementation of the educational program. The diet variable proposed an induced behavior to preferably eat vegetables, fruits, grains, seeds and fish; its objective was to learn how to make a suitable diet for the elderly. The activity/sedentary variable proposed practicing a regular routine of physiological activity exercises to reduce the levels of the observed sedentary lifestyle that come about in people with increasing age. The stress variable had the purpose of inducing them to a behavior and to a systematic practice of a neuromuscular relaxation technique in order to improve their capacity of coping with family and social stress to which the older adult is continuously exposed.

The evaluation instruments used in the research were three questionnaires and one scale. The questionnaires were: i) Do you have a Fantastic Lifestyle? (Wilson,

Nielsen and Ciliska, 1984); ii) the Mini Community Nutrition Screening Questionnaire (OPS/OMS, 2004); iii) the International Physical Activity Questionnaire (IPAQ, 2005); and, the Psychosocial Stress Scale (Holmes y Rahe, 1967). According to Suverza (2010), the questionnaire: “Do you have a Fantastic Lifestyle?” is used to identify and measure lifestyles; it is a self-application tool that explores people’s habits, behaviors and conducts to identify and measure adult lifestyles.

For the Pan American Health Organization and the World Health Organization (PAHO/WHO, 2001), the Mini Community Nutrition Screening questionnaire, found in the Clinical Guide for Primary Care of elderly people, is a research tool that has been developed and approved by both institutions; it is therefore considered a valuable support for professionals in the field of food health promotion and disease prevention. It is made up of 28 questions grouped into ten specific areas: family and friends; associativity and physical activity; nutrition; tobacco; alcohol and other drugs; sleep; work and personality types; introspection; health control and sexual behavior, and other behaviors. The objective of this questionnaire is to provide conceptual and methodological elements to understand the nutritional situation of elderly people and to detect their nutritional risk, defining the behavior to follow in accordance with the identified nutritional situation.

On the other hand, the International Physical Activity Questionnaire (IPAQ,2005) is a questionnaire that was used to analyze activity and sedentary levels, while González de Rivera and Morera (1983) point out that the Psychosocial Stress Scales is an evaluation instrument that serves to identify the level of manifested stress and evaluate stressful vital events that may contribute to the presence of a psychological disorder. These instruments allowed the construction, the complementation and the expression in the projection of a lifestyle; in addition, with the respectful interpretation of the personal ideas of the partners who had the opportunity to know how to improve the lifestyle. As previously mentioned, the research was carried out at three methodological points in time; in the first, the initial application of the evaluation instruments was carried out in order to ascertain the perceived health status at that time, and the resulting data were collected.

At the second methodological stage and taking into account the results obtained in the initial use of the instruments, a socio-educational program was designed with the purpose of modifying the inadequate health behaviors detected in the first evaluation. This educational intervention program was designed taking into account the diagnosis with the analysis of the detected reality gathering the necessary information, obtaining a picture of the reality and identifying the health problems and the moment to establish the objectives of teaching/learning/evaluation. The content of the program was structured on the basis of scientific knowledge and health techniques that have proven their effectiveness, but also with a language accessible to the cultural level of the participants. Finally, in the third methodological moment, the evaluation instruments were applied for the second time and the management analysis was carried out by using strategies of contact with reality such as dialog in the interview, reflection, collective realization of the workshops, the expression of experiences in the work field and the participant observation. Likewise, a longitudinal method was applied to observe the behavior of the variables at different times.

Results

The results obtained are a logical consequence of the mentioned three methodological moments, with the purpose of identifying, defining and justifying the changes made in behavior and healthy behaviors, using the registration units related to the objective of the research. The sample was made up of 36 people who were voluntarily self-chosen; of these, ten participants completed the research, proving that they live a healthy lifestyle. Initially, 100% attendance was observed, but it decreased because some had health problems that prevented them from attending, others because they helped with their presence to solve family problems; but perhaps the main reason was the cost of the ticket to go to the place of the meeting. In this way, the economic factor, family solidarity and the health of elderly people are factors that may limit their health education.

The lifestyle variable was evaluated with the “Do you have a Fantastic Lifestyle?” Questionnaire, obtaining, in the first evaluation, one person with an excellent lifestyle, five with a good lifestyle and four with a regular lifestyle. However, in the second evaluation they improved because nine people had an excellent lifestyle and only one showed a good lifestyle. Thus, the improvement in the participant’s lifestyle was that four people managed to improve their lifestyle practice from regular to excellent; four improved from a good to an excellent evaluation; one who practiced a good lifestyle retained a good practice; and one who already had an excellent practice retained the same evaluation. In this way, the final result in the evaluation of this variable was that nine people improved their lifestyle practice, obtaining an excellent evaluation and one preserved the practice of a good lifestyle; so everyone ended up living a healthy lifestyle that was convenient for their age. The Mini Community Nutrition Screening questionnaire was used to assess diet in food/nutrition; in the first assessment, five people expressed high risk nutrition, four were moderately at risk and one person practiced good nutrition.

In the second evaluation they improved, as eight participants reported good nutrition and only two were moderately at risk. The improvement in diet was reflected in two people were able to pass the high to moderate risk assessment; three went from high risk to good nutrition; four from moderate risk to good nutrition; and, one person was sustained with a good nutrition assessment. Finally, the result was that nine people were able to improve their nutritional practice without risk to their health and one person maintained a good practice in his diet; but, in addition, all ended up practicing a healthy and convenient nutrition for their age.

Regarding the International Physical Activity Questionnaire, used to evaluate the variable activity/sedentary, it was obtained that, for the first evaluation, one person qualified with low physical activity, seven with moderate activity and two with high activity. However, in the outcome of the second evaluation they improved because four participants reported high physical activity and six participants reported moderate physical activity. When comparing physical activity assessments, one person who never engaged in any type of conscious physical activity went from a a low level to a moderate level; five preserved the level of moderate activity by increasing the number of days; two improved from moderate to high practice; and two, with a high level of physical activity, preserved that level. The result was that, by the end of the evaluation, all participants were able to improve their level of physical activity because they built the habit of walking thirty minutes a day, from Monday to Sunday. Finally, the psychosocial stress variable was evaluated by the corresponding scale, which was used to know the stress level of the participants. In the first evaluation three people showed a high risk of stress and seven intermediate risk.

In the second evaluation they observed an improvement because the ten participants presented a stress level with only intermediate risk. In the psychosocial/family stress assessment it was observed that three participants started with high risk stress level in their mental health but managed to overcome it at an intermediate risk level and seven who initially presented an intermediate risk stress assessment retained the same assessment. As a result, three participants improved their stress level, lowering their risk of developing psychosocial problems; but in addition, all participants ended up with only an intermediate level of risk. This improvement was achieved by the weekly the neuromuscular relaxation technique practice; but they will be able to overcome the manifested intermediate risk when they form the habit of practicing this technique two to three times a week.

As can be seen, the results obtained in this work show that elderly people do have the ability to have a healthy lifestyle and can achieve healthy aging, as long as they have the opportunity to know and acquire the necessary knowledge to practice healthy behaviors.

Discussion and Conclusions

Based on the results obtained from the implementation of the program, it is determined that the ten people who managed to complete the health education program practice a healthy lifestyle appropriate to their age. This result was possible thanks to the elaboration of two life projects; an individual project and a group project. For the individual life project, the starting point were the evaluations obtained in the first application of the “Do you have a Fantastic Lifestyle?” Questionnaire; and, as a healthy individual project, the participants set out to pass these evaluations. The group life project was elaborated according to the scientific concepts that the participants perceived and noted in the development of the educational program. At the end of these interventions, the group proposed to draw up a summary of what each person considered important to put into practice and as a group they committed themselves to comply with it, In the result of management as a group life project they self-intended themselves as a self-help group.

Likewise, all the participants ended up practicing a diet without risk for their health and convenient for their age. This result was possible because the majority of the participants were woman, and because of their interventions in the meetings it was possible to perceive that they were very interested in knowing the characteristics of a healthy diet. Therefore, they were able to change the concept of food abundance for a quality of nutrition and to understand the difference between food and nutrition. Regarding physical activity, all participants were able to improve their level of moderate physical activity and they understood that moderate exercise is ideal for elderly people. In order to carry out a systematized physiological activation, they were proposed to practice the structured exercises of yoga, taichi, psychophysical gymnastics, chikung and conscious walking. However, yoga exercises could not be performed due to lack of adequate facilities, including space, showers, rug purchase, etc.; but one participant signed up and currently practices in a yoga gym.

Likewise, the taichi practices could not be performed because they could not learn the gait, which is the first basic exercise, because the following exercises are with the displacement of the body in a given space. Throughout the development of the

program, that is to say, once a week for eight months, they practiced exercises of psychophysical gymnastics, chikung and the technique of conscious walking. The purpose was these techniques to be learned and to practice them during the week. The objective was achieved because all participants improved their physical activity level by practicing a moderate level of activity due to the consciously structured habit of practicing the walking technique daily, from Monday to Sunday. In this way, the stress level also improved and decreased the risk of manifesting psychological problems. This improvement was achieved by all the activities carried out with the purpose of improving health, mainly in the weekly practice of the neuromuscular relaxation technique; but they will be able to overcome the manifested intermediate risk when they form the habit of practicing this technique two to three times a week.

In conclusion, and as a consequence of the above, we can deduce that, from holistic concept of health that perceives the individual as a whole, the physical health, the emotional balance and the mental health of the individual is accentuated, because these areas of human nature should not be perceived in isolation. And according to this eco-systemic vision, physical, emotional and mental functions must be taken care of, since a state of psychological well-being increases resistance to diseases of physical and behavioral origin. The success in this work was achieved thanks to the application of the knowledge that was proposed in the designed educational program; fully demonstrating that aging is an interactive, comprehensive, dynamic, adaptive and systemic phenomenon. Furthermore, with the application of knowledge in daily practice, it is demonstrated that lifestyle is recreated in perception/sensory and that it is a multidimensional, cognitive, volitional, aesthetic, pragmatic and communicative phenomenon. Therefore, this research work will be one more contribution to deepen the improvement of the state of health of the aging population in future times.

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