

ANALYSIS OF THE BENEFITS OF LIVING WITH PETS IN TERMS OF HUMAN DEVELOPMENT

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Abstract

This study aims to elucidate the human approach to development, in particular from the Human Scale Development theory, and to investigate the positive effects arising from the relationship between humans and animals in order to combine them with human development. The theory of Human Scale Development presented itself as a paradigm shift by advocating the protagonism of the human being during the development process. The natural and intuitive bond formed between people and their pets started to intrigue researchers around the world, giving rise to a series of scientific evidence that point to beneficial effects of this relationship. Pets have been found to have the ability to contribute in many ways to the well-being of their guardians. This article is part of the dissertation entitled "The interfaces of the relationship between human beings and pets from the perspective of human development", presented to the Postgraduate Program in Local Development at Universidade Católica Dom Bosco. The research has a qualitative approach, which employs the inductive method and, as to the objectives, it is an exploratory research combined with a literature review and document analysis. In conclusion, the bond between humans and pets can represent a human development factor.

Keywords: Pets, well-being, human development.

1. Introduction

The concern for the quality of human life emerged to consolidate a new kind of development, the so-called human development. Imbued with the desire to investigate these contours, Max-Neef, Elizalde and Hopenhayn (1989) presented their theory of Human Scale Development, arguing that development should be a process in which people can fully live their needs from the beginning, based on the tension between fundamental human needs, factors to satisfy those needs and economic goods.

The advent of the Human Development Index, in 1990, by the United Nations Development Programme consolidated this change in conceptions. Thus, the importance of expanding human freedoms, opportunities and capacities, in order to enrich human lives, began to be considered. Under this approach, progress and economic growth would still be important factors for development, but only insofar as they are able to improve the quality of life of the people participating in the entire process.

The natural approximation between humans and animals, which coexist in the same ecosystem for thousands of years, showed its true potential when animals rose to a new level, becoming pets. Through

this process, pets became much closer emotionally to their human partners and, thus, new questions arose about the consequences of this association.

In fact, in recent decades, several scientific experiments have demonstrated the positive value of the bond formed between human beings and pets, in a way that it came to be seen as an important factor for people's quality of life. Thereby, the discussion about living with pets entered the field of interest in human development.

So this study aims to investigate the potential beneficial effects of bonding with pets with regard to human development. The research, with a qualitative approach, employs the inductive method, associated with literature review and document analysis.

2. Human Scale Development

Based on the Latin American experience and using a transdisciplinary approach, Max-Neef, Elizalde and Hopehayn (1989) presented a new development model based on the protagonism of human beings and on their quality of life, in contrast to the dominant view as progress and economic growth.

Given the incompleteness of economic and social theories to guide the development processes experienced so far, combined with the growing heterogeneity of the global scenario, "it entails becoming aware that new and more disquieting frustrations will dominate our increasingly heterogeneous and interdependent world if development models based on mechanistic theories and misleading aggregate indicators, are applied" (MAX-NEEF; ELIZALDE; HOPENHAYN, 1989, p. 17). The paradigm shift conceived advocates the abandonment of the purely economic and mechanistic development bias, in order to face its true complexity, which now starts to orient towards other dimensions, among which, the well-being of the human person.

In the words of its creators, the basic postulate of the theory is that "development is about people and not about objects" (MAX-NEEF; ELIZALDE; HOPENHAYN, 1989, p. 19). In general terms, the theory intends to launch a real theoretical challenge to understand the dialectic between needs, satisfiers and economic goods.

The traditional view that human needs are infinite, changeable, variable according to culture, time and place, suffers, according to the authors, from a conceptual error. This misunderstanding lies in the confusion between the needs themselves and the ways to satisfy them, the so-called satisfiers. Therefore, for Max-Neef, Elizalde and Hopehayn (1989, pp. 26-27) the fundamental human needs are "finite, few, and classifiable" and, moreover, "are the same in all cultures and in all historical periods", from where it can be extracted that they are universal.

For the Human Scale Development theory, two criteria are combined for the definition of human needs: i) according to existential categories and ii) according to axiological categories. In this context, a classification is established that combines the needs of being, having, doing and interacting (according to existential categories) with the needs for subsistence, protection, affection, understanding, participation, idleness, creation, identity and freedom (according to axiological categories).

Taking into account that the classification of human needs transcends the notion of mere subsistence, these must be understood from their double existential condition, that is, as deprivation and as potential.

Defining needs only as deprivation implies a process of reductionism, since it assumes the understanding that they only manifest themselves, and become relevant, when people become aware of their non-fulfillment. On the other hand, by conceiving them as potentialities, the lines of understanding the human nature itself are broadened, as they represent the possibility of personal growth and overcoming.

In turn, the ways in which human needs are fulfilled are culturally and historically determined, which means that circumstances, culture, place, time, in addition to economic, social and political systems, directly influence the choice and availability, in quantity and quality, of satisfiers.

Satisfiers are immaterial, “they are related, instead, to everything which, by virtue of representing forms of Being, Having, Doing, and Interacting, contributes to the actualization of human needs” (MAX-NEEF; ELIZALDE; HOPENHAYN, 1989, p. 35). Thus, they reveal and update the needs in a culture or society, serving, therefore, as a history of the priorities of each time and place. It can be understood that they are in constant tension with social rhythms, between remaining and being replaced.

Bearing in mind that fundamental human needs are universal and satisfiers are variable, it should be noted that the same satisfaction factor can contribute to the fulfillment of one or several needs, in the same way that a need may require more than one satisfaction factor for its achievement.

The satisfiers, according to the aforementioned authors, can be of five types:

- a) destroyers, those that, on the pretext of satisfying a certain need, extinguish the possibility of its satisfaction in the short term, as well as make it impossible to meet other needs;
- b) pseudo-satisfiers stimulate the false feeling of a need’s satisfaction, however their effects can prevent the true satisfaction of that same need;
- c) inhibiting satisfiers, those that excessively satisfy one need and, therefore, make it difficult to satisfy others;
- d) singular satisfiers are intended to satisfy a single need, being indifferent to others; and,
- e) synergic satisfiers, by the way they fulfill a certain need, they are able to leverage the entire system, stimulating and contributing to the fulfillment of other needs.

The first four categories of satisfiers (destroyers, pseudo-satisfiers, inhibiting, and singular) are generally exogenous, that is, traditionally imposed or induced from the top down. The last category (synergic), on the other hand, derives [...] from liberating processes which are the outcome of acts of volition generated by the community at the grass roots level” (MAX-NEEF; ELIZALDE; HOPENHAYN, 1989, p. 36).

Goods are objects, things, materials or artifacts “which make it possible to increase or decrease the efficiency of a satisfier” (MAX-NEEF; ELIZALDE; HOPENHAYN, 1989, p. 27). They are, thus, enhancers of the satisfiers' capacity to fulfill human needs, being able, on the one hand, to contribute with them, and, on the other, represent true setbacks.

The forms of production and especially of consumption of material goods must be taken into account in order to build a healthy society. It is enough to remember that, as materiality, goods have a physical existence and, consequently, are followed by an environmental impact, in such a way that they aggravate the larger system of life. Furthermore, the ideal purpose of material goods as tools or means to enhance the positive capacity of satisfiers is easily distorted in consumer societies and cultures. In these, an obsessive desire for consumption is implanted which, by reflex, operates the greatest circulation of products, in a constant cycle of production and disposal, when, then, the goods become ends in

themselves and start to relate directly to needs.

Directly relating needs and economic goods in a supposed dynamic of satisfaction implies the recognition of an objective, economic and mechanistic model, whereby the realization of needs necessarily depends on the production, demand, availability and consumption of goods in society. On the other hand, incorporating the notion of satisfiers means facing goods as facilitators or stimulators that allow subjects to fully live their needs. Ultimately, the insertion of satisfiers into the system transforms the objective into the subjective.

The authors then present their proposal for development, from a systemic approach to fundamental human needs, in order to understand them as a range of categories equal in importance, which stand out as deprivation and potential. This strategy emphasizes the supply and generation of endogenous and synergic satisfiers, in quality and quantity, to encourage initiatives resulting from local processes, from the bottom up, in addition to improving the fulfillment of human needs in a full and healthy way, without losing sight of the concern with other aspects of sustainability.

Human Scale Development advocates the fulfillment of human needs throughout the development process, in a broad spectrum, that is, overcoming the mechanistic and economic vision that overvalues subsistence. It is intended, therefore, to reconcile economic growth with respect for people's quality of life, so that they can effectively experience development which, in the final analysis, will make the entire process human, healthy, participatory and conscious.

3. Benefits of bonding with pets: a literature review

In an attempt to understand the bond that unites tutors and pets, numerous scientific researches have been carried out in recent decades whose results suggest that “pet acquisition may have positive effects on human health and behavior, and that in some cases these effects are relatively long term” (SERPELL, 1991, p. 717). In this sense, there is “substantial evidence to support the positive benefits of animal companionship for various segments of the population, especially children, the elderly, socially isolated, and the handicapped” (BECK, 2000, p. 11).

Researchers have already concluded that pet owners tend to have higher self-esteem, be physically healthier, less lonely, more conscientious, more extrovert, less fearful and less worried when compared to people who did not have pets for the company (MCCONNELL *et al.*, 2011). With regard to physical health, it was found that dog owners tend to practice more physical activity, in addition to walking more often (for their own recreation or recreation in the neighborhood), in contrast to people who do not own animals (CUTT *et al.* 2008). From a complementary angle, it was found that the acquisition of this animal may be related to the maintenance of the intention to walk in its guardians over a long term (CUTT; KNUIMAN; GILES-CORTI, 2008), which can be explained by the positive effect on the guardian's opinion on the act of walking, as well as the motivation and social support derived from this relationship. Furthermore, pet tutors tend to perform more leisure activities related to nature, which naturally involves physical exercise and, for this reason, these activities affect health in a positive way (MÜLLERSDORF *et al.*, 2010).

Pet guardians tend to have significantly lower levels of systolic blood pressure and plasma triglycerides

when compared to people without pets, which consequently reduces the risk of suffering from cardiovascular disease (ANDERSON; REID; JENNINGS, 1992). In this sense, “dog ownership is associated with reduced all-cause mortality possibly driven by a reduction in cardiovascular mortality” (KRAMER; MEHMOOD, SUEN, 2019, p.7). Furthermore, it reduces the risk of death after a heart attack or stroke and also reduces the chances of recurrent events (MUBANGA *et al.*, 2019).

The bond between humans and pets is able to attenuate reactivity and the perception of stress (ALLEN; BLASCOVICH; MENDES, 2002). Even though it is an unfamiliar dog in an unfamiliar environment, contact with this animal is able to attenuate heart rate and cortisol during a stressful event (POLHEBER; MATCHOCK, 2014). Therefore, dog companionship can be qualified as a source of social support and is related to reducing the risk of stress-related illnesses. In addition, it was found that physical interaction and socialization with animals, dogs and cats, for just ten minutes, is able to significantly reduce the levels of cortisol, a hormone related to stress in humans (PENDRY; VANDAGRIFF, 2019).

It was found that just “a dog’s gaze can be considered as an attachment behavior that elevates the OT levels of the owner” (NAGASAWA *et al.*, 2009, p. 440).

Walsh (2009), when analyzing the role of pets in family systems, states that they are generally a factor that unites the family, increasing its cohesion and promoting interaction and communication among its members. They also offer the opportunity to learn about the family organization itself, especially when it comes to the division of care responsibilities. Furthermore, according to the author, in family dynamics, the bond with pets is more valued in times of crisis, loss and adversity, since the support resulting from this relationship is a source of resilience.

McConnell, Lloyd e Humphrey (2019) elaborated on the effects of the pet owners’ perception in relation to pets as family members. In this case, it was shown that these animals are perceived as agents of social support and, therefore, improve the physical and mental well-being of their owners. Furthermore, by admitting the entry of pets into the family environment, the matter spreads to other spheres, starting to involve issues of identity, social connection and resilience.

Dogs can be considered powerful catalysts for social interactions between people, fostering the formation of new social networks, as well as eventually consolidating them (MCNICHOLAS; COLLIS, 2000). These animals have the ability to provide social integration and create opportunities for the relationships’ development, which increases their guardians’ psychological well-being. It has been shown that having a dog can positively affect parents’ perception of the neighborhood environment, which allows children to take part in leisure activities outside the home (ROBERTS *et al.*, 2017). This is explained by the fact that having a dog and walking with it brings neighbors closer, creating a bond of neighborhood and intimacy, together with the sense of security deposited in the animal that it can protect the child.

Having a dog has physical, psychological and social benefits for the elderly population (KNIGHT; EDWARDS, 2008). Participants described dogs as the main motivators of physical exercise, especially walking, which is also related to social contact. Animals were reported as important factors for quality of life, as they provide companionship and comfort. Another relevant aspect was the observation that dogs provided participants with a sense of security and, therefore, were seen as protectors.

Pets play an important role in the recovery process for adults with severe mental disorders. For this population, it was evident that pets were able to help in the recovery process as they were a source of

empathy and therapeutics, enabling social connections, functioning as part of the family and improving self-esteem, self-efficacy and, consequently, strengthening the sense of empowerment of these people (WINDOM; SAEDI; GREEN, 2009).

As for the physical and emotional health of children, it was observed that those who live with dogs are less likely to develop childhood anxiety, particularly social and separation anxiety (GADOMSKI *et al.*, 2015). Contact with dogs and cats in the first year of life can have a protective effect on infections and symptoms in the respiratory tract, in addition to being associated with less morbidity in general, which could be said to improve resistance to infectious respiratory diseases during childhood (BERGROTH *et al.*, 2012). In this case, contact with dogs was more significant in terms of protection than with cats. Furthermore, exposure to two or more dogs or cats in the first year of life can reduce the risk of developing allergic diseases during childhood (OWNBY; JOHNSON; PETERSON, 2002).

A dog's presence has the potential to motivate obese children to practice physical activities (WOHLFARTH *et al.*, 2013). The strong bond established between children and their pet dogs is associated with more active time with these animals, probably because they represent an implicit motivation for children to move or play, whether indoors or out (GADOMSKI *et al.*, 2017). The relationship between pets and children is also associated with the development of emotional expression, potentially reducing children's emotional sensitivity and inhibition. Children who have pets are likely to have more control over their emotions and know how to recognize them, which results in better development of their own personality and emotional functions (SATO *et al.*, 2019).

Beetz (2013) studied the effects of the teacher's presence with his dog in the classroom, a practice that has become popular in countries such as Germany and Austria. The researcher set out to investigate the impact in terms of social interactions of the teacher's joint work with the pet, noting an improvement both in the students' positive attitude towards the school and in their emotions regarding learning, factors that represent the potential to help with learning and education.

The inclusion of animals in schools and classrooms is capable of producing effects in terms of learning and socio-emotional development. Human-animal interaction, then, directly affects children in terms of motivation, self-efficacy, commitment, attention, coping with stress and social interaction, factors that culminate in indirect effects on learning, education and socio-emotional development (GEE; GRIFFIN; MCCARDLE, 2017).

Gee, Griffin e McCardle (2017) emphasize, given the importance of literacy, that a program that involves reading for dogs has become popular in countries such as Australia, Germany, Japan, Spain, the United Kingdom and the United States. "These programs aim to improve reading by providing practice opportunities, possibly affecting student engagement, motivation, and self-efficacy" (GEE; GRIFFIN; MCCARDLE, 2017, P. 5). Regarding this type of program, in fact, evidence was found that the presence of a therapy dog in the classroom has the power to improve children's reading performance, either by representing a source of social support (which does not judge or criticize), a motivating factor, to change the social environment in a positive way, or to be able to reduce stress and anxiety levels while performing tasks (WOHLFARTH *et al.*, 2014).

Audrestch *et al.* (2015) set out to explore the importance and impact of assistance dogs in society. Assistance dog is an animal specifically trained to perform tasks that increase the autonomy and

independence of its human companions, who have some type of disability, and despite being different from normal pets, it shares the benefits arising from this interspecies relationship. The partnership established between the tutor and the assistance dog is “[...] often a complex multidimensional relationship” (AUDRESTCH *et al.*, 2015, p. 471) and several aspects must be considered to enumerate the resulting benefits. One of the main advantages arising from this relationship is the increased autonomy, independence and freedom of the human partner, mainly due to the ability of these animals to perform daily activities. However, others can also be mentioned: promotion of psychological well-being, protection, companionship (with the reduction of loneliness), social integration and improvement in self-esteem (and, therefore, confidence). Such findings allow the authors to affirm that the importance of these animals far exceeds their initial functions and they must be valued and recognized by government social policies.

The scientific researches presented and analyzed in light of the objectives of this work are representative of the growing interest in the effects of the pets’ companionship, a phenomenon that intrigues researchers around the world. Nevertheless, each theme raised here has a vast literature, in addition to numerous other issues whose specificities open up a wide field of exploration.

It is important to mention, however, that some of the findings related positive consequences to mere contact with animals, that is, unfamiliar beings (BEETZ, 2013; POLHEBER; MATCHOCK, 2014; PENDRY; VANDAGRIFF, 2019; e GEE; GRIFFIN; MCCARDLE, 2017). This finding only illustrates the complexity and richness of this type of interaction, suggesting that even people who do not have pets can enjoy the benefits of this natural and intuitive connection with other species.

In any case, from the data collected it is evident that “bonds with pets offer comfort, affection, and a sense of security” (WALSH, 2009, p. 482), and based on the affection bonds built between the two species, as well as its effects in terms of quality of life, the approach shifts to the realm of human development.

4. Pets as human development factors

The human development approach directs the development processes in the search for people's quality of life, in order to expand their possibilities of choices, capabilities and opportunities, so that they can pursue the goals they consider valuable and decide on their own paths. Therefore, it strives for the elimination of deprivations in order to live a full life.

Notably, the choice to enjoy life in the company of a pet is in harmony with the precepts of human development, especially by allowing people to improve their personal choices, direct their life plans, optimize their capabilities and pursue the goals to that attend and respond to everything that allows them to be happy.

Considering the precepts of the work of Max-Neef, Elizalde e Hopenhayn (1989) which were once deepened, living with pets can be seen as a satisfying factor of several fundamental human needs. From the combination of the Human Scale Development theory and scientific evidence on the potential benefits of the human-animal relationship, related to dogs in many cases, it is possible to extract:

- a) Having pet's companionship contributes to fulfilling the essential human need for subsistence by improving physical and mental health (SERPELL, 1991; MCCONNELL; LOYD; HUMPHREY, 2019), particularly of children (BERGROTH *et al.*, 2012; WOHLFARTH *et al.*, 2014; GEE; GRIFFIN, MCCARDLE, 2017; SATO *et al.*, 2019), elderly (KNIGHT; EDWARDS, 2008) and people with disabilities (AUDRESTCH *et al.*, 2015); represent an important source of social support (CUTT; KNUIMAN; GILES-CORTI, 2008; WALSH, 2009; MCCONNELL *et al.*, 2011; POLHEBER; MATCHOCK, 2014; WOHLFARTH *et al.*, 2014; MCCONNELL; LOYD; HUMPHREY, 2019); make their tutors more physically active (CUTT *et al.*, 2008; MÜLLERSDORF *et al.*, 2010; MCCONNELL; LOYD; HUMPHREY, 2019); motivate the practice of exercises by obese children (WOHLFARTH *et al.*, 2013) and the elderly (KNIGHT; EDWARDS, 2008); reduce the risk of occurrence of cardiovascular diseases (ANDERSON; REID; JENNINGS, 1992; KRAMER; MEHMOOD; SUEN, 2019; MUBANGA *et al.*, 2019); improve resistance to infectious respiratory diseases (BERGROTH *et al.*, 2012) and reduce the development of allergic diseases (OWNBY; JOHNSON; PETERSON, 2002) during childhood; attenuates reactivity and stress perception (ALLEN; BLASCOVICH; MENDES, 2002), reduces cortisol levels (PENDRY; VANDAGRIFF, 2019) and attenuates heart rate during stressful events (POLHEBER; MATCHOCK, 2014), which implies a reduction in the risk of stress-related illnesses; decreases the likelihood of developing childhood anxiety (GADOMSKI, *et al.*, 2015); assists in the recovery process of people with severe mental disorders (WISDOM; SAEDI; GREEN, 2009); for people with disabilities, the assistance dog represents their own autonomy, in addition to promoting psychological well-being (AUDRESTCH *et al.*, 2015);
- b) As for the fundamental need for protection, pets are able to unite family members, improving cohesion and family routine (WALSH, 2009); to fortify social environments through the integration and development of relationships (MCNICHOLAS; COLLIS, 2000); to provide a sense of security (KNIGHT; EDWARDS, 2008; WISDOM; SAEDI; GREEN, 2009; AUDRESTCH *et al.*, 2015; ROBERTS *et al.*, 2017);
- c) To fulfill the fundamental need for affection, the link between species can increase oxytocin levels in humans (NAGASAWA *et al.*, 2009); makes people less lonely (MCCONNELL *et al.*, 2011); becomes part of the family entity (WALSH, 2009; MCCONNELL; LOYD; HUMPHREY, 2019); contributes to the formation of meeting spaces for the elderly, especially during walks, which provides greater social contact (KNIGHT; EDWARDS, 2008); brings neighbors together, creating a bond of neighborhood and intimacy (ROBERTS *et al.*, 2017); helps in the process of expression, control and recognition of emotions in children (SATO *et al.*, 2019);
- d) In relation to the fundamental need for understanding, animal visitation programs at universities promote the well-being of academic staff, in particular by functioning as stress-relief tools (PENDRY; VANDAGRIFF, 2019); the presence of animals in the classroom is able to aid in learning and education (BEETZ, 2013; GEE; GRIFFIN, MCCARDLE, 2017), as well as improve the children's reading performance (WOHLFARTH *et al.*, 2014);
- e) As for the fundamental need for participation, pets promote interaction and communication within the family, uniting its members (WALSH, 2009); dogs are powerful catalysts for social interactions

between people, in order to stimulate, consolidate and increase social networks (MCNICHOLAS; COLLIS, 2000); provide opportunities for the creation of neighborhood bonds (ROBERTS *et al.*, 2017) in order to build interaction areas in communities or neighborhoods; enable social contact for the elderly (KNIGHT; EDWARDS, 2008); in the school environment, it makes the emotional experience and interaction between students and teachers positive (BEETZ, 2013; GEE; GRIFFIN, MCCARDLE, 2017); increase the sense of connection with other humans and with the animal itself (WISDOM; SAEDI; GREEN, 2009); for people with disabilities, assistance dogs promote social integration (AUDRESTCH *et al.*, 2015) by mediating human relationships;

- f) Pets have an impact on satisfying the fundamental need for idleness by increasing the parents' sense of trust in their surroundings, which enables children to practice outdoor activities (ROBERTS *et al.*, 2017); provide the practice of more activities related to nature (MÜLLERSDORF *et al.*, 2010) and recreational walks (CUTT *et al.*, 2008; CUTT; KNUIMAN; GILES-CORTI, 2008); motivate recreational walks for seniors (KNIGHT; EDWARDS, 2008); represent an affective stimulus for children to practice physical activities (BERGROTH *et al.*, 2012), as well as for them to move or play, which results in more active time with these animals (GADOMSKI, *et al.*, 2017);
- g) To meet the fundamental need for creation, pets can contribute to the development of emotional expression in children, in order to reduce emotional sensitivity and inhibition (SATO *et al.*, 2019); are related to the improvement in the positive activity of students towards the school and in the emotions related to learning (BEETZ, 2016); affects children in terms of motivation, self-efficacy, commitment and attention (GEE; GRIFFIN, MCCARDLE, 2017); make their tutors more extrovert, less fearful, and less worried (MCCONNELL *et al.*, 2011);
- h) Pets contribute to satisfying the fundamental need for identity as they are related to improving the self-esteem of their human partners (MCCONNELL *et al.*, 2011); when considered as family members, they present themselves as agents of social support (MCCONNELL; LOYD; HUMPHREY, 2019), an important factor for resilience (WALSH, 2009); collaborate with the socio-emotional development (GEE; GRIFFIN, MCCARDLE, 2017), emotional expression, personality and emotional functions of children (SATO *et al.*, 2019); strengthen the feelings of belonging, social integration, self-esteem, self-efficacy and empowerment of people with mental disorders (WISDOM; SAEDI; GREEN, 2009); as they are a source of autonomy, assistance dogs help to improve self-esteem and confidence in people with disabilities (AUDRESTCH *et al.*, 2015);
- i) Finally, with regard to the fundamental need for freedom, pets allow children to play outside (ROBERTS *et al.*, 2017); as a result of their sense of safety, animals contribute to the autonomy of the elderly (KNIGHT; EDWARDS, 2008); they represent a communication opportunity for children, who can freely express their emotions without fearing negative responses (SATO *et al.*, 2019); the main mission of assistance dogs is to promote the autonomy, independence and freedom of people with disabilities (AUDRESTCH *et al.*, 2015).

It is possible to notice, then, that pets play an important role in people's lives, and that the bond formed between humans and animals can have positive and beneficial implications. However, the demonstration that this bond is capable of fulfilling fundamental human needs is not enough for the theory of Human Scale Development. It is essential to analyze its quality as well.

The decision to share life with an animal radiates positive effects throughout the system of needs, even when the person is not aware of these consequences. So, for example, when adopting a pet for company purposes, the person will also enjoy the benefits in terms of physical and psychological well-being, such as reducing the risk of developing cardiovascular diseases and stress-related illnesses, in the same way, will have the opportunity to take advantage of interactions and social contacts motivated by this animal. In the illustrated case, despite the initial intention to satisfy the need for affection, the same behavior will contribute to meeting the needs of subsistence and participation.

Due to this bias, and considering the types of satisfiers presented by Max-Neef, Elizalde and Hopenhayn (1989), having a pet is consistent with the notion of synergic satisfaction factor. This is because, by the way it fulfills a need, it is capable of going beyond its symbolic boundaries to reach other needs, starting to stimulate them in the same way. Furthermore, from the small sample of scientific evidence listed in this study, it is possible to perceive the capacity that this satisfaction factor has to simultaneously fulfill all fundamental human needs.

In addition to representing a highly synergic satisfaction factor, having a pet stems from a subjective and voluntary act and, consequently, bears the quality of being endogenous. Thus, there is no way to think that this relationship is imposed or induced from the top down, precisely because it originates from the personal decision of capable and eager subjects to direct their life projects that allow them to live their needs in a full and integrated way. Therefore, it is a bottom-up movement related to achievable and effective local processes.

However, given the merit gained by pets, their recognition by institutions and organizations could also have beneficial impacts on society. It is true that the pets' adoption should be a conscious act, as it involves a series of responsibilities and duties, but government support would be an apt means to contribute to social well-being, as well as offering training opportunities, awareness, information and prevention.

It is still important to note that this relationship can be beneficial not only to human beings, but also to the animals themselves. Under this bias, Serpell (2015) argues that what unites humans and animals would be a bond of mutualism, through which species can enjoy mutual benefits arising from this association. For human beings, several positive effects in terms of quality of life have already been studied and, on the other hand, for animals there was the opening of a new ecological niche that gave them subsistence conditions and, consequently, allowed for the increase and the maintenance of its population.

This bond with other animals, natural and intuitive of the human species, despite all the above, is experienced and felt daily in a strictly personal scope, considering that each person carries their own feelings, thoughts, ideologies, expectations, aspirations and anxieties, which results in a unique experience. Science undertakes to investigate its implications in a broad spectrum, conjecturing associations, relationships and consequences, which, in reality, represent only parts of the whole. Thus, each one adapts, in their own way, this connection to fulfill their needs, filling their deficiencies and enhancing their personal capabilities.

Therefore, the company of pets presents itself as a synergic and endogenous satisfaction factor, adapting to the precepts of the Human Scale Development proposal by allowing people to live their needs

abundantly, in order to multiply well-being and prevent the emergence of individual and social poverty and pathologies.

5. Conclusion

In the course of the societies' transformations, there was awareness that the blind pursuit of economic growth, based on mechanistic thinking, is not enough to guide what is understood by development. It started to be conceived as a multidimensional process, which also includes the search for people's quality of life and the concern with environmental conservation.

The human development approach, therefore, shifted the axis of the development discourse, not to subjugate economic development, but to make it compatible with social well-being. The true value of economic progress is determined by its ability to enrich human lives as well.

The proposal for the development of Max-neef, Elizalde and Hopenhayn (1989) precisely advocates the transition from the idea of development as a goal to the notion of development process, in which people can live and fulfill their fundamental needs from the beginning. This theory defends the permanent stimulation of synergic and endogenous satisfiers, recognizing the importance of local initiatives and democratic participation. Adhering to its precepts is capable of giving rise to healthy, participatory and sustainable development.

As noted, the human bond with pets proved to be a valuable way of fulfilling fundamental human needs, which bears the characteristics so desired by the Human Scale Development theory, that is, it is a synergic and endogenous satisfaction factor.

It is synergic in that it has the ability to simultaneously meet and stimulate several, or even all, fundamental human needs. Indeed, this satisfaction factor has the potential to contribute to: physical and psychological well-being, recovery and resistance to illnesses, children's emotional development, quality and quantity of social interactions, family routine, self-esteem, resilience, autonomy, among others. Furthermore, its relevance is not restricted to a single group, as it contributes to fulfilling the needs of both adults, children, the elderly and the physically and mentally handicapped.

From another perspective, it is also endogenous because it must be the result of individual and conscious choices, never imposed, compelled or forced. Despite the many advantages that can be obtained from the relationship with pets, the fact is that the decision to follow this path should not be motivated exclusively by them. It means that the value of this relationship lies in the affective connection, intimacy, in the companionship between the species, and that all these benefits are added to the will of those who would proceed in the same way even if none of them were known.

The decision to enjoy life in the company of an animal can be considered a human development factor. However, in order to achieve this goal, it is essential that this choice be conscious, responsible, and especially attentive to its ethical implications. The complexity of this association should be mentioned, as it can sometimes also cause negative impacts on the social environment or even on the well-being of the animals themselves. The concern with environmental sustainability cannot be lost sight of, at the risk of sacrificing the merits of the positive effects in terms of human well-being.

6. References

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