 http://dx.doi.org/10.1590/0103-656420180142

Theoretical contributions on aging from the perspective of person-environment studies

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Abstract: Adapting to environments is paramount for strengthening the well-being and quality of life. Person-environment studies seeks, among other interests, to deepen the understanding of how to build greater congruence between individual needs and the characteristics of the physical environment to reduce pressure levels and environmental stress resulting from these adaptations. From the 1970s, this human-environmental reciprocity was explored by Lawton and colleagues in the institutional context. The theoretical pressure-competence model and the ageing-in-place concept are seen as contributions to enrich the dialogue between scholars, focusing on the human-environment congruence related to individual characteristics and environmental resources. Therefore, enhancing the role and actions of the elderly in the use of public spaces and enabling them to be included in the city planning, is to improve the active and relevant character of their achievements, favoring the emergence of new horizons.

Keywords: ageing, ageing-in-place, person-environment studies.

Contemporary life implies facing challenges that require adaptations between the demands of the physical and social environment and individual capabilities. Considering the complexity of the human-environment interrelationship, the speed of contextual changes and the necessary actions to successfully meet these demands, how can we conceptualize these dynamic and bidirectional transactions? Starting from the classical perspectives, the city has been conceived as a social construction characterized by contrasts resulting in different spaces for specific groups. Urban heterogeneity provide unique experiences that may generate either distance and indifference towards other people and the environment or the formation of social bonds based on feelings of belonging and community participation (Lynch, 1999, Simmell, 1967; Wirth, 1967). Empirical studies on cities emphasize the physical and mental overloads on the ways citizens feel, think and act (Kaplan & Kaplan, 1989; Milgram, 1970). Such overloads include increasingly long periods spent on commuting, insecurity resulting from urban violence and density, different types of pollution, low levels of accessibility, to name a few (Ramírez, 2002).

Relations established with the physical environment throughout human development imply the need for constant adjustments that affect health-disease processes and identity formation. Adaptations to all sorts of environments are essential for strengthening the well-being and quality of life of urban populations. From an ecological perspective the sceneries and physical elements composing the urban context shape behaviors, establishing some scripts that govern daily life (Pinheiro, 2011).

Among other interests, studies on human-environment interrelations seek to deepen the understanding of how to build a greater congruence between individual needs and the characteristics of the physical environment, in order to reduce pressure levels and environmental stress resulting from these adaptations (Gatersleben & Griffin, 2017; Perlaviciute & Steg, 2012).

The pressure-competence model and the person-environment congruence

Environmental pressure consists of the demands that influence people, considering their individual capabilities to adapt to the resources available in the physical environment and their needs of use. Therefore environmental pressure imposes varying levels of environmental stress which, in turn, relate to the physiological and emotional responses of the organism to external demands. Stress prepares the body to face imposed situations and is subject to each individual's degree of adaptation (Günther, 2011; Günther & Fragelli, 2011). Changes in pressure levels affect human beings differently, and each individual has a distinct pressure threshold. Hence people remain little aware of the environment until there is an increase in pressure levels to the point of requiring adjustment and adaptation (Lawton & Simon, 1968).

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In this sense, both the individual characteristics and the pressure exerted by the environment, potentiating or reducing overloads may indicate behaviors with different levels of adaptation. This human-environmental reciprocity in adaptation management was explored by Lawton and colleagues from the 1970s on, in the context of facilities of long term care for the elderly (FLTCE). The ecological model of human ageing (Lawton & Nahemow, 1973) identified that specific environments with higher levels of pressure significantly affect people with low behavioral competence regarding cognitive, physical and social competences, making the person-environment interrelationship less docile (environmental docility hypothesis). Conversely, when the individual has abilities that enable a greater adaptation and use of the available resources in place, it may be affirmed that in this interrelation there is a proactive action, which defines the hypothesis of environmental proactivity.

Kurt Lewin's premise (1951), according to which behavior is a function of the person-environment interaction, has generated reflections on how the environment affects human beings in their daily experiences. Based on this premise, Lawton (1991) designed a quality of life model, and argued that aspects of the physical environment, individual behavioral skills and perception of well-being are directly implied in the adaptation process to the environment. According to this model, the congruence between environmental characteristics and individual needs is used as a means to understand the environmental impact on people's well-being and adjustment, the concept of environmental docility plays a salient role in this interrelationship. Therefore, it is important to question not only whether the environment is good but to whom it is good (Kahana, 1982; Kahana, Lovegrenn, Kahana & Kahana, 2003). The term docility refers to the notion of what is docile, that is, what is apt to fit. Terms such as flexibility, softness and malleability are taken as synonyms. For these reasons, docility reflects the idea employed by Lawton (1991) in his pressure-competence model.

The basic functions used to evaluate the person-environment congruence are maintenance, stimulation and support. The maintenance function is related to the concept of ageing in place, as it presupposes a constant environment with some level of predictability, thus allowing for appropriation and attachment, preserving positive meanings and affections. The stimulation function concerns the capability of the environment to be flexible as it brings some mystery and can lead to new arrangements, behaviors and relationships according to the needs of users. And the support function refers to the guarantee of elimination of obstacles and barriers, making the environment accessible (Silva & Elali, 2015; Tomasini & Alves, 2007).

The concept of ageing in place emphasizes the strengthening of social bonds and environmental support in the home surroundings so as to provide accessibility, independence, mobility and community involvement (Iecovich, 2014; Lima, 2011; Wiles, Leibing, Guberman, Reeve & Allen, 2011). This idea is in line with more recent approaches involving the environmental docility hypothesis. (Wang & Lee, 2010), because initial studies emphasized the relationship of the elderly with institutional environments, aiming at understanding how they felt when moving from their homes into elderly care institutions.

The individuals are thus conceived starting from attributes that indicate their functional capacities in terms of physical and mental health, considering their performance in daily activities and their adaptation level. The environment in turn involves different aspects and dimensions that generate pressure, and is subdivided into: (1) personal environment – comprising significant persons for a given individual, such as family and friends; (2) group environment – involving people who share the same environment, regardless of the type of relationship; (3) Suprapersonal environment – composed of composed of individuals with similar characteristics (eg.: gender, age, preferences, income) that get together (4) sociocultural environment – refers to the broader social characteristics that underlie rules and regulations at each place; and (5) physical environment – refers to influence factors such as lighting, noise, thermal sensation, furniture, etc. that can be measured in natural and constructed contexts. It is important to emphasize, in each of these dimensions, how the interrelationships are reflected in the person-environment congruence (Lawton, 1986; Lawton & Brody, 1969).

Parallel to this, the bioecological theory of human development proposed by Bronfenbrenner (1999) also presents a subdivision of the environment into levels that resemble those presented by Lawton. In his Process-Person-Context-Time (PPCT) model, Bronfenbrenner defines that certain activities (processes) are performed by individuals with specific bio-psychosocial characteristics (person), who interact and establish distinct relationships with environments and people (context) along their development (time). These relations occur in five levels: (1) the microsystem, defined by each individual's immediate proximal relations and most significant people and environments; (2) the mesosystem, consisting of the connection of microsystems that compound each individual's experiential dynamics with his or her peers; (3) the exosystem characterized by shared environments and relations established therein according to predetermined functions; (4) the macrosystem, represented by the sociocultural aspects of each place; and (5) the chronosystem determined by individual and environmental changes over time.

The analyses performed by Lawton and his team have generated evaluations that are highly focused on adjustments or adaptations between individual demands and behavioral capabilities with the availability of environmental resources to satisfy needs. It has been

established that a good fit occurs when an environment provides support and is flexible to the demands and capabilities of the individuals who make use of it (Oswald, Wahl, Martin & Mollenkopf, 2003).

The pressure-competence model and the aging process

Lawton's initial theorizations dealt with the pressure-competence model based on Kurt Lewin's Field theory and sought to study the specificity of the relationships of people with certain behavioral skills who adapt to an environment with given physical characteristics (Moore, VanHaitsma, Curyto & Saperstein, 2003). Ageing is associated with a number of difficulties, including strangeness at facing new environments, which can significantly interfere with the exercise of autonomy and independence (Snowdon, 2002). Therefore, the pressure-competence model argues that the behavior of the elderly is the result of the interaction between their competences and the levels of environmental pressures (Batistoni, 2014).

In this ecological model of ageing, the pressure of the environment comes from the ability of the person to adapt to the environmental characteristics according to his/her competences. Such competences include biological health, sensory-motor functioning, cognitive abilities and mental health. Moreover the environment, besides generating pressure, offers resources that may or may not be adequate to individual needs (Lawton, 1986).

From this perspective, the person-environment congruence is situated on a continuum from behaviors that negatively affect the elderly to behaviors that act positively on them in an area of maximum comfort and performance (Moore et al., 2003). In addition to the conclusions drawn from this model, some contributions were important for its complementation. Carp (1976) highlighted the need to recognize competences also as coming from needs that stimulate the behavior of the individual to build more favorable environments to his/her health. Thus, the focus favored is on the design of accessibility, that is, on the spatial arrangement of the environment, services and forms of mobility that ensure the independence of the elderly in the social use of spaces. It seeks, therefore, to make adjustments among the user's needs and the type of environmental resources available to serve those needs (Carp, 1988).

It was following this line that Lawton and Nahemow (1973) conceived the environmental proactivity hypothesis, in which they admitted the active attitude of the person in his/her relation to the environment. This action occurs through the changes that the individual makes in the environment in order to reduce the pressure and optimize his/her competences (Batistoni, 2014). In view of these articulations, Kahana (1982) highlighted that the person-environment congruence leads to variations according to personal characteristics and needs, and environments also vary to the extent that they are able to meet such needs. Therefore, the person-environment relationship occurs at the interface between subjective experiences and the physical environment that produce effects on human behavior. The contributions of Moos and Lemke (1984) go in this direction with the proposition of a socioecological model that comprises social influence in this context of person-environment fit.

These models emphasize the reduction of individual skills and competences as age advances and they state that, as the elderly become more environmentally docile and less environmentally proactive, human-environmental interactions are impaired and the mobility of these individuals becomes restricted. These limitations have consequences for their salubrity in terms of independence, autonomy and, in some cases, institutionalization processes (Wang & Lee, 2010). The environmental docility hypothesis encompasses the elderly-environment relationship in its original formulation. Although the denomination does not clearly express this interrelationship, studies carried out in this perspective demonstrate that docility does not take place a priori, but it is constructed and perceived according to the abilities and competences of the elderly in their experience of space.

Despite Carp's remarks in the 1970s against the association of the concept of environmental docility to pathologies alone, it is still common for researchers to focus their studies on populations affected by dementias or chronic diseases. These studies seek to describe the availability and usability of neighborhood resources, examine associations of objective aspects of the environment with quality of life in old age, and verify the influences of the physical environment in terms of behavior and mobility (Algase, Beattie, Antonakos, Beel-Bates, & Yao, 2010; Van der Pas et al., 2016; Van Leeuwen et al., 2014). For this to happen, the hypotheses of environmental docility and proactivity align with claims that indicate the need to promote healthy environments (Lawton, 1986; Torres, 2015; Torres & Elali, 2015).

The pressure-competence model and some possibilities of dialogue

In view of these parameters, it is possible to draw approximations with the guidelines of the universal design defined in the area of architecture and urbanism. Since the 1970's, Michael Bednar (1977) has argued that the removal of environmental barriers is capable of promoting individual capabilities and the functional use of spaces. However, it was only in 1985 that Ron Mace and colleagues began to use the term "universal design" (Bernardi & Kowaltowski, 2005). Led by Ron Mace – an architect an architect who used a wheelchair because he contracted polio as a child – a group of designers and educators from five American organizations

developed the set of principles of a universal design in 1997. The basic concept is the elaboration of products and environments that can be used and experienced by individuals of the most varied ages without any need of adaptation (Mustaquim, 2015).

Also called inclusive design, the conception of universal design includes the following principles: (1) equitable use, by which no group of users is excluded, neglected or stigmatized; (2) flexibility in use, which presents a wide variety of choices of use and incorporates various skills; (3) simple and intuitive use, which allows an easy understanding of the elements that compose the environment, regardless of the user's cognitive level or current state of attention; (4) perceptible information, which communicates to the user what is essential to use, irrespective of the conditions of both the environment and the individual; (5) error-tolerance, by which the design minimizes the possibility of accidents, incidents and risks; (6) low physical effort which provides comfort and efficiency with low physical and mental fatigue; and (7) appropriate space for providing access, use, reach and manipulation, regardless of the user's characteristics (Lima, 2011; Mustaquim, 2015).

The existence of barriers in the urban environment, which includes access to places of housing, services and public transportation, is a current urban problem. One of the main goals of universal design is to eliminate these barriers from architectural designs. To that purpose, it aims at a participatory planning for the construction of spaces, including the communities that use them in the elaboration of proposals of environments that promote quality of life and well-being (Bernardi & Kowaltowski, 2005).

Spacial planning therefore must guarantee the right to accessibility. Jahn Gehl was one of the architects who promoted this idea by exploiting human needs and defending healthy cities for all. According to him, providing mobility in public spaces brings improvements to urban areas and organizes pedestrian, bicycle and automobile traffic, which results in quality of life and the right to the city (Gehl, 2013).

The strategy of age-friendly cities is linked to these benefits by understanding that the physical and cognitive limitations that arise as the body ages result in needs to be met by urban design (Nieboer & Cramm, 2017). The World Health Organization (Organização Mundial de Saúde, 2007) states that designing such cities involve the provision of quality public services and leisure spaces to foster the building of social bonds and a support network to share information and care. These initiatives enable, the inclusion and participation of the elderly, who have their social role recognized and respected.

Accessibility is essential for people to feel included in the urban environment. Accordingly, the right to walk must be guaranteed so that people can circulate in the city – which is enabled by quality improvement – bringing comfort and safety to spaces and favoring mobility. The right to come and go is essential for people to interact with each other and with their surroundings. Facilitating mobility reduces the risk of falls and favors positive self-esteem and social contact. These functionalities imply reducing barriers with the implementation of rest benches, rails, ramps, areas for safe pedestrian traffic, adequate height of the curbs, among other aspects to be incorporated in public spaces (Gehl, 2013).

Therefore, it is imperative that programs aimed at the elderly population have, as an inalienable criterion, the satisfaction of their needs in the planning of environments, given the multidimensionality of ageing. In Brazil, the Statute of the Elderly (Brasil, 2003) states that the housing conditions must guarantee security, control and salubrity. Thus, the promotion of activities, a good public transportation system, the absence barriers that may cause physical damage adapted and safe housing, social exchanges and ties, illuminated streets, traffic rules adapted to the elderly's mobility limitations, access to clean and treated water, healthy eating and mobility programs are solutions that strengthen community ties and promote well-being (Silva, 2014; Torres & Elali, 2015).

In addition to the issue of housing, recent studies suggest that neighborhood relationships bring benefits to the elderly, which include physiological and psychological improvements, subjective well-being and quality of life, as well as stress reduction (Cao, 2016). Regarding the increase in the quality of life, Sugiyama and Thompson (2007) identified three types of involvement with neighborhood environments: (1) participation in diversified activities in external settings; (2) exposure to natural elements and outdoor activities; and (3) social interactions with peers. Open spaces may be perceived by the elderly as providing opportunities to alleviate tensions, find people and perform activities.

Adding to these aspects, the human-environment interrelations results in subjective experiences permeated by affective and cognitive processes, which are particularly important to understand how people experience places, the use they make of them, how they evaluate them and how this impacts on the performance of their daily activities (Wahl, Iwarsson, & Oswald, 2012). Thus the relationship between spaces and people interacts with the perception of the physical and psychological surroundings (Gehl, 2006). For Thibaud (2018), the encounter of these sensorial aspects with the corporal experience is reflected in the ambience and involves the characteristics perceived in the contact with objective and subjective elements of each environment, the involved sensations, the expressed affections and actions implicated in the appropriation process.

Environmental psychology, as a field of study aimed at understanding the psychosocial processes arising from the interrelationships between people and their environments, recognizes the reciprocal character of these relationships. Hence it considers the environment as a dimension that encompasses psychosocial, cultural and

contextual elements and, through its physical elements, enables the construction of different perceptions, evaluations and actions (Günther & Rozestraten, 2005; Rivlin, 2003).

Attention oriented to the elderly proves to be prior to person-environment studies. Christianity stood out as a pioneer in the attention directed to this population, which was considered devoid of care in the Byzantine Empire. According to records, the first institution dedicated to the elderly was founded by Pope Pelagius II (520-590), who turned his residence into a hospital for the old people. Gradually, institutions turned into asylums, shelters and homes, in order to serve this unassisted public. Specifically in Brazil, this attention was devoted to the less favored and more vulnerable (Alcântara, 2003).

Interest in studies of human-environment relations began with the pioneering investigations of North American researchers in the 1960s (Sommer, 1973). In the meantime, housing policies for the elderly were enhanced throughout the world, particularly regarding the construction of care institutions for old age. Initially this field was focused on the effect of the institutional environment on behavior. From this emerged the ecological model of ageing and its nuances. After confronting criticism, these ideas were expanded and focused on environmental adaptation guided by users' needs in order to reduce environmental pressure levels. Currently researches are more directed towards the social relations in open spaces, psychological healing and environmental docility (Torres, 2015).

Due to the increase in life expectancy, and consequently in the world's elderly population, research in the United States and in Europe since the 1970s has directed attention to the institutionalization of the elderly's health. In such studies, satisfaction with the residential setting was perceived as a priority to guarantee a healthy ageing. More recent research emphasizes the benefits of ageing in place, thus increasing the demand for environments suitable for older people (Iecovich, 2014).

These changes also resulted in a movement, initially in the Netherlands and Denmark, of house sharing among the elderly with the aim of creating alternatives to institutionalization. Cohousing processes has been expanding since the establishment in 1984 of the Association of Housing Communities for Elderly People in the Netherlands. With a focus on promoting active ageing and preventing loneliness through the maintenance of a support and mutual care network, relevant principles in the conception of friendly communities (Bamford, 2005).

Currently, cohabitation models include groups with sexagenarians as well as intergenerational groups in order to offer interaction and develop a sense of community among their members. Since their foundation, more than 100 cohabitation programs have emerged in Denmark, ranging from ten to 20 houses. In the Netherlands, this type of organization has become part of government policies and has served as basis for the provision of health services and welfare promoters, which proves its effectiveness in reducing care demands (Brenton, 2013). Such indexes restate the interest of the elderly population in cohabitation and the need to discuss and understand how cities can be better structured to provide and manage this type of alternative.

Bronfenbrenner's contributions, with the bioecological model, helped the understanding of factors interrelated with human development theories and living conditions. Likewise, the studies conducted by Carp (1976) provided the opportunity to expand the field of research on ageing, since she was the author of the first text associating conditions of housing and health of the elderly. And Rudolph Moos also contributed to this area using the ecological approach to understand how housing and institutional settings could interfere in the health and disease processes of the users of these spaces (Maddox, 2001).

Classical models of ageing have not totally clarified the elderly-environment relationship, but added essential points to their articulation with environmental gerontology and the ecological model proposed by Lawton. The expansion of the awareness that ageing is a multidimensional process has shown that biological decline in old age is only one of the aspects to be considered at this stage of life. The field of environmental gerontology presents itself as one of these advances, including the environment as a preponderant factor to analyze and improve aspects of the relationship between the elderly and their environment from an interdisciplinary point of view (Wahl et al., 2012).

Based on the role that the residential environment plays in the health-disease processes of the elderly who tend to remain in these spaces for a longer time, researchers have focused on the evaluation and analysis of these contexts. Already in the 1990s, Christensen, Carp, Cranz, and Wiley (1992) developed a study to examine indicators of the physical environment and their relationships with subjective evaluations dwellers regarding their satisfaction with the place they lived. From the 4,534 questionnaires applied to people aged 75 and over, they investigated structure, maintenance and use of the residence. Findings indicated that structure and maintenance are predictors of subjective evaluations of housing quality. Aspects such as age, health, family arrangements, housing costs and family provider were controlled.

The expansion of studies with this orientation began to concentrate not only on the residence itself, but on its surroundings, incorporating neighborhood and the services available in these places. While examining the effect of the removal of physical barriers from open spaces following governmental guidelines, Weenberg, Hyden, and Stahl (2010) observed the effects in the usability and mobility of the elderly, and identified greater satisfaction after the intervention. In assessing objective measures in the environment that either facilitated or hindered walking among the elderly, Wang and Lee (2010) identified positive

correlations among landscaping, safety perception, and sidewalk paving. The environment appeared to be an important support factor for the promotion of walking among older people.

In the 1970s and 1980s, the field of environmental gerontology acquired more solid contours so as to deepen these discussions based on the theoretical models proposed by Lawton and colleagues. Of great influence, the hypotheses of environmental docility and proactivity continues to receive attention when the person-environment adjustment is discussed, since they highlight the balance between gains and losses in old age, in order to deal with external pressures (Moore, 2005). Another important contribution offered by Baltes (1987) is the proposition of a general adaptation process defined by the terms Selection, Optimization and Compensation (SOC). The selection of resources available in the environment leads to alternative routes to compensate for losses (competencies), and optimize the adaptation to the pressures imposed by the external context. (Neri, 2006; Silva & Günther, 2000). Lawton (1991) himself, in subsequent surveys in the 1990s, concluded that the elderly are able to choose, manage, and adapt environments according to their needs.

Final remarks

From this perspective, reflecting on the pressure-competence model and the concept of ageing in place, we envisage possibilities of enriching the dialogue between scholars and populations concerning the person-environment congruence as to individual skills and environmental demands for the satisfaction of needs. The theories of Bronfenbrenner (1999) and Lawton and colleagues, associated to their principles and the guidelines for a more inclusive urban design and extended to individuals of different age groups and competencies, enable the articulation of socioenvironmental characteristics to enhance independence, safety and attractiveness of the residential environment to city dwellers.

It is in this context that age-friendly communities become more and more relevant. The arguments presented in the human-environment studies, emphasizing the field of environmental gerontology, show that ageing can occur in a successful and active way through the implementation of solutions that optimize the congruence between competencies and demands (Golant, 2014, 2016). Characteristics associated with friendly settings have shown that they significantly influence the abilities of the elderly, which has contributed to the enhancement of global initiatives and the construction of information exchange networks with research and extension projects. The Vancouver Protocol, for example, establishes methodological guidelines for study planning and for collecting and organizing qualitative data that can target interventions in different contexts (WHO, 2007).

We reaffirm therefore that reassessing the role and actions of the elderly in the use of public spaces and including them in urban planning mean a valorization of the active and relevant character of their contributions, expanding and enhancing accessibility in large cities. It is already a progress to recognize that there is no single model of environment for use and appropriation when considering human specificities, especially groups that have little visibility in the urban entanglement, by conducting studies that enable observing, listening and processing demands related to the contexts of human ageing.

Contribuições teóricas sobre o envelhecimento na perspectiva dos estudos pessoa-ambiente

Resumo: A adaptação aos ambientes é primordial para fortalecer o bem-estar e a qualidade de vida. Os estudos pessoa-ambiente buscam, dentre outros interesses, aprofundar a compreensão de como se constrói maior congruência entre as necessidades individuais e as características do ambiente físico, a fim de reduzir os níveis de pressão e estresse ambientais decorrentes dessas adaptações. Essa reciprocidade humano-ambiental foi explorada por Lawton e colaboradores, a partir da década de 1970, no contexto institucional. O modelo teórico pressão-competência e o conceito envelhecimento no lugar (*ageing in place*), vislumbram-se como contribuições para o enriquecimento do diálogo com estudiosos, tendo como foco a congruência pessoa-ambiente, isto é, as inter-relações entre o indivíduo e os recursos ambientais. Logo, valorizar o papel e as ações de idosos no uso dos espaços públicos e possibilitar sua inclusão no planejamento das cidades é aprimorar o caráter ativo e relevante de suas conquistas, favorecendo o desabrochar de novos horizontes.

Palavras-chave: envelhecimento, envelhecimento no lugar, relação pessoa-ambiente.

Contributions théoriques sur le vieillissement humain du point de vue des études personne-environnement

Résumé : L'adaptation aux environnements est primordiale pour renforcer le bien-être et la qualité de vie. Les études personne-environnement visent, entre autres intérêts, à comprendre profondément comment construire congruence une plus grande entre les besoins individuels et les caractéristiques de l'environnement physique pour réduire les niveaux de pression et de

stress environnemental résultant de ces adaptations. Lawton et ses collègues, à partir des années 1970, ont exploré cette réciprocité entre l›homme et l›environnement dans le contexte institutionnel. Le modèle théorique de la pression-compétence et le concept du maintien sur place (*ageing in place*) sont considérés comme des contributions à l'enrichissement du dialogue entre chercheurs, en mettant l'accent sur la congruence personne-environnement liée aux caractéristiques individuelles et aux ressources environnementales. Par conséquent, renforcer le rôle et le actions des personnes âgées dans l'utilisation des espaces publics et leur permettre d'être inclus dans l'urbanisme, c'est améliorer le caractère actif et pertinent de leurs réalisations, en favorisant l'émergence de nouveaux horizons.

Mots-clés : vieillissement, maintien sur place, études personne-environnement.

Contribuciones teóricas sobre el envejecimiento humano desde la perspectiva de los estudios persona--ambiente

Resumen: La adaptación a los ambientes es primordial para fortalecer el bienestar y la calidad de vida. Los estudios persona-ambiente buscan, entre otros intereses, profundizar la comprensión de cómo construir una mayor congruencia entre las necesidades individuales y las características del entorno físico, a fin de reducir los niveles de presión y estrés ambientales que resultan de estas adaptaciones. Esta reciprocidad humano-ambiental fue explorada por Lawton y colegas en la década de 1970, en el contexto institucional. El modelo teórico presión-competencia y el concepto de envejecimiento en el lugar (*ageing in* place) se consideran contribuciones al enriquecimiento del dialogo entre académicos, centrándose en la congruencia entre el ambiente y el ser humano relacionada con las características individuales y los recursos ambientales. Por lo tanto, mejorar el papel y las acciones de los ancianos en el uso de los espacios públicos y permitir su inclusión en la planificación urbana es mejorar el carácter activo y relevante de sus logros, favoreciendo la aparición de nuevos horizontes.

Palabras clave: envejecimiento, envejecimiento en el lugar, estudios persona-ambiente.

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Received: 07/30/2018
Approved: 09/27/2018