This study aim to evaluate the functional ability of residents of a Long Stay Institution for Aged and its interaction with the environment, checking limits and potential of older people in the use of space and perception about their functional capacity in relation to environment of use. This is a qualitative approach taken in the city of Uberaba-MG, Brazil. It was found that the institution in question does not meet the minimum recommended standards; it was found that the elderly are more dependent in Instrumental Activities of Daily Living than in Activities of Daily Living and have good insight into their functional capacity in relation the use of the environment, emphasizing it as a barrier that contributes to the dependence on the caregiver and the loss of individuality and privacy. The institutional environment by acting as barrier interferes restricting of daily activities and the preservation of the dignity of elderly.

Descriptors: Occupational Therapy; Health of Institutionalized Elderly; Homes for the Aged.

Este estudio tiene como objetivo evaluar la capacidad funcional de los residentes en una Institución de Longa Permanência para Ancianos y su interacción con el medio ambiente, la comprobación de los límites y el potencial de las personas mayores en el uso del espacio físico y la percepción sobre su capacidad funcional en relación al uso del medio ambiente. Se trata de una investigación cualitativa hecha en la ciudad de Uberaba, MG, Brasil. La institución en cuestión no cumple con los requisitos mínimos sugeridos por las normas legales, las personas mayores son más dependientes de las actividades instrumentales de la vida diaria que en las Actividades de la Vida Diaria y tienen una buena percepción de su capacidad funcional en relación al uso del medio ambiente, apuntando este como una barrera que contribuye a la dependencia del cuidador y la pérdida de la individualidad y privacidad. El entorno institucional, actuó como barrera restringiendo las actividades diarias y la preservación de la dignidad de las personas mayores.

Descriptors: Terapia Ocupacional; Salud del Anciano Institucionalizado; Hogares para Ancianos.

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INTRODUCTION

The increase in the elderly population is considered a worldwide phenomenon, being the ageing one of the most significant trends of the 21st century. In 1950, there were 205 million people with 60 years old or older in the world. In 2012, the number of elderly people has increased to almost 810 million.

Currently, the elderly correspond to approximately 23.6 million people, representing a significant portion of the Brazilian population, which totals 12.1% of individuals aged 60 years old and above. In Uberaba-MG, Brazil, city of the present research, the elderly population represents 12.5%.

The aging process of the human being is accompanied by progressive age-related losses, by the presence of risk factors and higher chance of the emergence of chronic degenerative diseases, which may provide for the elderly degree of dependence and interfere with functional capacity gradually.

The decreased functional capacity against economic instability and structural change of the contemporary family and the dynamics of the society, in which there are increasingly the insertion of the largest possible number of family members in the labor market, in particular of women, can drive the elderly to greater vulnerability and/or prone to institutionalization.

In this scenario, there is the need of the fitness and the reorganization of health services in ILPI and the need to create and adopt strategies for maintaining functional capacity, beyond his rehabilitation when compromised, and this reinforced in one of the main guidelines of the National Health Policy of the Elderly Person.

Functional capacity has been shaping up as new health indicator for the elderly, with emphasis on the assessment of the functionality and the valorization of autonomous life, even if being an elderly with one or more diseases, transcending the diagnosis and treatment of these. Their evaluation can be performed using objective measures of performance (standardized and situational tests) and by self-report of difficulty or need to help with everyday activities.

Among several concerns related to the challenge of promoting and maintaining functional capacity of institutionalized elderly, the characteristics of the environment were highlighted, since they interfere directly in the functional performance of the elderly and the mediations of the dependency process.

Friendly and welcoming environments are configured as health promoters, in order to act as a facilitator, and damper attenuator in advanced age; increasing security and existing competences of the elderly and enabling respect to their dignity and their values.

The physical context represents the second largest influence to get global quality of life.

Among several concerns related to the challenge of promoting and maintaining functional capacity of institutionalized elderly, include the characteristics of the environment, since they interfere directly in the functional performance of the elderly and the mediations of dependency process.

This research is justified by bringing a vision that transcends the physical aspects and standardization of space, when considering the look of the elderly that realize the dignity, cultural values, beliefs, customs and the emotional aspects that may affect the fulfilment of their activities, since the use of the environment to be shared with the institution may lead to loss of identity/subjectivity of the subject, making him oblivious to the environment and his own life.

This research had as its objectives: to assess the functional capacity of the elderly residents of a ILPI and its interaction with the environment; check the limits and potential of older persons in the use of physical space and the perception of the elderly on their functional capacity in relation to the use of the environment.
METHOD
It is a research with qualitative approach. The data collection was carried out during the period from August to November 2010. The sample was composed by ILPI in the city of Uberaba-MG, Brazil, considering its physical structure, and for six elderly residents, including four women and two men.

The institution chose the following inclusion criteria: belonging to the city of Uberaba-MG; physical environment with greatest inadequacies and less accessibility; ILPI inserted in mode II, due to the same dependent and independent elderly; ILPI with larger number of elderly people of both genders with dependency degree I and II and ILPI in which the elderly could have effective benefits with environmental changes.

The inclusion criteria for selection of the elderly was from the outcome of the global cognitive tracking performed by the Mini Mental State Examination (MMSE)\textsuperscript{18}, since cognition has fundamental importance in everyday tasks and in their perception. The MMSE was applied to all elderly and selected those who had a score of more than 20 points, when considered illiterate, the 25 points when between one to four years of study, from five to eight of 26.5 years, 28 of nine to 11 years and 29 > 11 years of study\textsuperscript{19}.

It is highlighted that all subjects were clarified and guided regarding their participation. After agreeing to participate, they signed an informed consent (TFCC) based on Resolution 169/1996\textsuperscript{20} respecting the ethical precepts of research with humans. This investigation was approved by the Research Ethics Committee of the Universidade Federal do Triângulo Mineiro, under opinion No. 1563/2010.

This research was divided into two stages. The first evaluation was undertaken of the physical environment through the script by ILPI Accessibility inspection created in the counties of the State of Minas Gerais (MG) by the Center for operational support of the Courts of Justice in defense of the rights of people with disabilities and the elderly (CAOPPDI); the application of semi-structured questionnaire to the President of the institution about the same characteristics, the elderly residents and caregivers; and characterization of functional capacity of the elderly through the application of Scales of daily life activities\textsuperscript{21}.

The scales of daily life activities assess 14 categories, grouped into two parts: scale of activities of daily life (part I) and Instrumental Activities of daily living (part II). Each part was analyzed by the sum of their categories, being that the higher the score, the greater the degree of dependency. Added to the points in part I, we obtain a total score minimum of six and maximum of 30; and in part II, total minimum of eight and maximum of 31 points.

In the second step, after application of the scales, an open interview with the elderly in which reported in greater depth their perception on the use of the environment for conducting each activity of daily living and instrumental. The interviews were recorded and transcribed in full to data analysis. The identification of lines of each elderly was presented with the letter S followed by the number of each participant S1, S2, and so on.

For analysis used as theoretical discourse analysis of Matriz Peuchetiana, which seeks to go beyond what it is said, what is on the surface of the evidence, by the confluence of the fields of knowledge of Linguistics, Marxism and psychoanalysis\textsuperscript{22}.

RESULTS
In relation to the institution’s internal features, this is philanthropic character housing currently with 33 elderly of both sexes, aged between 60 and 110 years old. The institution approaches to mode II, differing in the aspect of maximum recommended capacity of the elderly,
featuring a total of residents above the established norm.

The only criteria for inclusion of the elderly in the institution is to be minimum age of 60 years old, however, there are people younger than that found in the institution for dereliction of family or legal issues.

The institution has been working for 20 years, consisting of a house of masonry, with fourteen rooms, four suites, a social bathroom, a kitchen, a patio, a pharmacy, a doctor’s office, a warehouse, a pantry, a laundry and a linen closet.

With regard to data obtained in the application of Scales of Daily Life Activities most elderly (n=5) referred in the AVD requiring minimal assistance (n=1) or moderated (n=4) for carrying out the activities evaluated, what causes greater dependence on caregiver that are classified as dependents. Only one of the participants (subject three) presented independence, getting six points.

The AIVD noted that all elderly people are dependent on and that this factor relates mainly to the issue of institutionalization, with activities that they do not have opportunity to perform them (such as going shopping). In this part, the elderly have obtained as average score of 27 points, approximate score to total dependence.

In relation to the analysis of the data of the opened interview with the elderly, four fragmentation were identified: dependency and the number of caregivers to provide assistance; perception on their functional capacity in relation to the use of the environment; environment as a barrier to implementation of daily activities and concern about the loss of individuality and privacy, listed below with its fragmentation and lines.

1st - Dependence and the Number of Caregivers
The data shows that there are similar perceptions regarding dependency and number of caregivers. The elderly have considerations that can only perform their AVD with their help:

"Uai, girls give them [bath]. I help a little.” (S4)
"I bathe alone. He [caregiver] who gives bath to everybody. " (S5)

It is evidenced through lines that the elderly nurture a negative conception of dependency and appropriate the realization that being careful carries a nasty feeling, i.e. denotes weight and hopelessness:
"(...) is calling others [caregivers]it is not good”. (S2)
"There are times that it is better to die. He gives you a hard time and waiting for the others." (S5)
"It's like I can't get around alone, driving the wheelchair, I need to be taken. Sometimes it is complicated, because everybody is busy at the time you need [to use the toilet]. So I need to wait. " (S2)
"(...) There are days that I sit a long time there in the courtyard, waiting for someone to help me to go in the bedroom. " (S5)

2nd - Perception about their Functional Capacity in relation to the use of the Environment
It is found that the elderly could boast the perception about their performance in their daily activities. However, they emphasize the characteristics of the environment as determinant for partial or moderate dependence of caregivers:
"I have control [sphincter], but I need help. Because it does not have bars to hold, I can't get there. " (S1)
"I feel [sphincter], but I can’t even get in the bathroom. I have difficulties to walk. So, there is no place to support, everything is far, hard. Then I need some help or have to use diaper.” (S6)

3rd - Environment as a Barrier to Implementation of Daily Activities
It is found in the speaking of all elderly people the physical environment of the institution presents architectural barriers that restrict and hinder the performance of its activities and also increases the dependency state. Such barriers exert a negative influence on health condition:
"Here everything is far away, almost no way to support, the ground is rigged. Here it was not thought to get old. Old people have
trouble and here to do almost everything is complicated." (S3)

“(…) It’s hard to walk all over the hallway, it is big and all lopsided. The chair sometimess is swinging like a grit.” (S2)

4th - Concern with the Loss of Individuality and Privacy
There is on the part of the elderly a concern in relation to the institutional environment enabling a space that allows maintaining the privacy and individuality during the realization of the AVD, in particular, the activity of the bath:

"Here there’s only one bathroom. And, worse, the bathroom has no door. I has already happened to enter in the bathroom and see a lady there. Naked! It happened to me to be there and also another person arrives.” (S1)

"There is open and everyone uses, I change of clothes in my room.” (S2)

DISCUSSION
The dependence on the AVD has also been found in a survey conducted with 103 elderly living in different IPLI in the city of Porto Alegre, RS, Brazil. The activities that the elderly needed more assistance was related to that of saluting with highest percentage (49.6%), followed by clothing (47.6%) and bath (43.7%)23.

In another study conducted in Maringá, PR, Breazil, with 70 elderly sample, it was found that only 4% of elderly could perform all the AVD with ease and autonomy24. It stresses that the lack of autonomy in dealing with the activities of daily life is among the main determinants of dependency of the elderly5 and, among the main reasons for institutionalization25.

The elderly when becomes dependent on partial or total mainly in the AVD, which are geared to the individual's care for his own body12 loses the sense of freedom and feel bothered by having to depend on others for these activities26.

In relation to the AIVD, it is important to reflect that in addition to the influence of institutional factors, they are more complex than the AVD, which explains the greater difficulty to perform AIVD than AVD12. In research conducted with 41 elderly residents at the condo Village Life of Jataí-GO, Brazil, it was observed that the elderly were more dependent on the AIVD, corroborating with the results of the present research27.

Ribeiro11 describe with there is a hierarchy in loss of independence among the elderly, losing first the skills to perform Advanced Activities of Daily Life, after the AIVD and lastly the AVD. However, it should be noted that the independence in these activities suffer influence of institutional aspects, in which perpetuate particular characteristics, permeating their physical constitution, normative character and routines with rules.

In a study conducted in the city of Taubaté, SP, Brazil, it was found that institutionalization is most often associated with functional dependencies, limitations and lack of autonomy, revealing a bleak picture, pointing out the need for stimulus and encouragement of elderly residents at ILPI for the potential for self-care28.

Another study with a sample of 93 elderly residents in four institutions in the municipality of Lamego (Portugal), it was pointed out divergent data of research, in which 63.4% of the elderly were independent and 4.3% of them significantly dependent14.

The physical dependence relates to one of the aspects resulting from the functional incapacity, which is defined as the individual difficulty or dependence in performing activities essential to independent living, including self-care activities and those considered important for personal satisfaction and maintaining quality of life29.

It is highlighted that approximately half of the cases of functional disability of the elderly is due to the association of chronic
disease and co-morbidities as well as institutionalization, dependence of a caregiver and a higher risk for falls.

In a research conducted in the city of Curitiba, with elderly residents in an ILPI, it was observed high prevalence of chronic disease, use of medicines and physical and cognitive disorders. The health condition brought repercussions on the lives of the elderly and the difficulty or inability to carry out its activities independently.

Another important aspect to be considered is that the very physical dependence can lead to dependence and be marked by behavioral institutional environment. In this sense, in the stimulating ILPI autonomy and independence of the elderly is an essential condition for maintaining their physical and behavioral independence.

In this respect it can be affirmed that the dependency and the limitation or loss of autonomy translates for the loss of illusion of power itself, as well as alternates and personal choices limited or non-existent, leading elderly people to own more intensely the sense of finiteness.

That feeling contrasts to current values of life, like beauty, productivity, the pleasure and the desire to prolong life, triggering, in most cases, feelings of hopelessness about life and the future.

This conception still negative is reinforced by the number of caregivers. On the lines of the elderly shows an insufficient number to attend the needs of the residents.

A study addressing the caregiving patterns observed and reported conceptions by caregivers regarding dependence in institutionalized elderly, it was found that there are four patterns of interaction between the caregiver and the elderly. These were: maintaining the autonomy, stimulus to autonomy, encouraging dependency and dependency maintenance.

Among the episodes recorded it was reached 84.3% of the dependency condition. At ILPI, this pattern of dependence, is something common, because the number of elderly people with varying degrees of dependence is too big for a few caregivers. In addition, there are norms and routines imposed for residents and professionals.

In the context of institutionalization, it can be noted a degree of power and control of carers, comparable to that of parents on young children. In the name of efficiency, rapidity and perfection of the work, the tasks that could be performed by the elderly are being gradually lost, delegates and leading to inactivity and reinforcing the hopelessness of tem.

This dependency will reflect not only the autonomy and independence of the elderly, but in their values, beliefs and customs. Although they are common procedures used by caregivers that can injure the right of the elderly to privacy.

The physical environment can contribute to dependency and restriction of living space or could be favorable and stimulating, in order to provide a set of experiences that allow the elderly to stay active and independent for as long as possible.

By analyzing the discursive formation of S2, the realization of a ransom to the subject's cultural context in relation to "brita" through the memory of others, times of forgetfulness.

In speech analysis this forgetfulness is called example and produces an impression of reality of thought and makes believe that there is a direct relationship between thought, language and the world. Through this speech, the rescue of the Customs and beliefs of the elderly.

It is highlighted that the elderly have difficulties to work in adverse environmental situations and with which they are unfamiliar, potentially leading to falls, accidents, dependency and inactivity.

These factors underscore the individual difficulty and/or the dependency of caregivers for the achievement of its activities, as can be evidenced by the lines of respondents and results obtained in the ADL Scale. These limitations reported and experienced by the elderly can be explained in part because the institution does not comply with the minimum requirements.
recommended by the legal norms that regulate the functioning of ILPI.

The standard of quality in attendance must be institutional in appreciation of the history of life, with due regard to privacy, participation in the community, opportunity of choice, autonomy, personalization, security and functionality. On the lines of the elderly, it was noticed that the institution still retains features and similarities with those found in Total Institution. Such features are also highlighted by other factors: as in physical structure, due to the high walls and external access door locked up; the use of collective spaces, the non-existence of locals for most elderly can save their belongings and administer them, or even refer a given space as theirs.

The elderly become citizens violated in their individuality, as it can be seen in the speech S1, where the subject has no control of his own life, without right to their privacy and social effects, causing a suppression of their wishes, desires, dreams, which are being shared with the institution, causing in this way, processes "unpersonified", "uncultural", causing the loss of stigmatizing identity/subjectivity of the subject, making him oblivious to the environment and their own life.

The complete respect for the dignity, when institutionalized, is conditional upon the design and planning of a safe environment, with ability to stimulate autonomy and independence, respect for privacy and individuality. Plan environmental adaptation is all the more important insofar as the elderly analyzes the environment, based on its values, customs and beliefs.

CONCLUSION

Despite the dependence is not a condition that reaches uniformly in all areas of operation of the elderly, based on the results found in this research, it is possible to check that participants have relevant indicators (behavioral and physical dependence of the caregiver for realization of the AVD, little realization of AIVD for institutional issues, environmental limitation in performing activities, loss of dignity and privacy) for functional incapacity.

In this perspective, the occupational therapist gives priority to not only the factors of the client, but also the influence of contexts (physical, social, cultural, spiritual, temporal, personal and virtual) in the demands of the activities and the degree of participation in their occupations.

It is highlighted the importance of continuing research into the relationship between the environmental context and the functional capacity of institutionalized elderly, considering that given this new demographic profile and social changes, the institutions will continue and as important housing environments and interfere directly in the functional performance of the elderly. And, for the design and planning of environments represent the second largest influence for overall quality of life and enabling the preservation of dignity in old age.

It emphasizes the importance of exceeding the limits of speech and implement effective actions and policies that involve professionals, elderly, families and civil society, together with entities and agencies involved, so that the fundamental rights is guaranteed in old age.

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From:


CONTRIBUTIONS
The authors worked together in all stages of production of this paper, whether in study design, data collection and analysis or final writing of paper.