

# Human aging and ageism: a study with Brazilian individuals over 40 years old

Juçara Pereira da Costa Neves<sup>1</sup>[0000-0002-4752-9388], Neusa Maria Bastos Fernandes dos Santos<sup>1</sup>[0000-0003-3469-4592], Igor Polezi Munhoz<sup>2</sup>[0000-0001-5578-3442], Alessandra Cristina Santos Akkari<sup>3</sup>[0000-0002-5376-7972], Danilo Nunes<sup>1</sup>[0000-0002-5663-3750] and Marco Antonio Ferreira<sup>1</sup>[0000-0001-9685-4884]

<sup>1</sup>Pontifical Catholic University of Sao Paulo (PUC-SP), Sao Paulo, Brazil

<sup>2</sup>Federal Institute of Education, Science and Technology of Sao Paulo (IFSP), Sao Paulo, Brazil

<sup>3</sup>Mackenzie Presbyterian University, Campinas, Brazil  
admneusa@pucsp.br

**Abstract.** Associating organizational management in the face of population aging, prejudice and age discrimination play a significant role. Thus, the present work addressed issues related to prejudice and discrimination of Brazilians aged 40 or older in the work context and the challenges faced by these individuals. A bibliographic and a quantitative-descriptive research were conducted with data obtained through an online questionnaire, answered by 52 professionals within the research age group. For data treatment, the descriptive and inferential statistics were applied through the Chi-square independence test to verify the existence of association between certain variables. The data indicate that the Brazilian workers participating in the study perceive the existence of prejudice and age discrimination in the labor market, as well as several challenges during the job placement process, although the variable *age* was not statistically associated with the *victim of prejudice* ( $p = 0.179$ ) or *equality of opportunity* ( $p = 0.404$ ). This study aims to bring data to support reflections on organizational management, promoting studies directed to the ageism theme.

**Keywords:** Aging. Ageism. Brazil. Prejudice.

## 1 Introduction

Aging is a process of chronological origin that all individuals experience, which is a natural, inexorable and irreversible phenomenon. The aging process and its consequence are some of the concerns of humanity since its inception. However, it has been in the twentieth century that great advances have been made in the science of aging, through knowledge gained in little more than a hundred years since Elie Metchnikoff in 1903 and Ignatz L. Nascher in 1909 began the process. systematic study of gerontology and geriatrics [1].

The aging of the world population makes the debate on ageism important, which is still a little discussed form of age-based prejudice that causes discrimination against

the elderly, contributing to the marginalization and eventual social exclusion of this public.

Regarding the job issue, the Brazilian labor market has become increasingly demanding in relation to professionals in recent times, as private companies are also increasingly selective in choosing their professionals. There are many criteria for choosing a professional, which often makes them “discriminatory” (including age discrimination) in choosing the professional to join or even stay on your team. Nowadays, it is noticed that the Brazilian labor market is often disinterested in relation to the “mature” worker, making it important to expand the possibilities of professional performance for these people [2].

In this sense, it is important to define from what age a professional can be considered uninteresting due to age for the labor market, as this conception can vary greatly between cultures, historical periods and sector of activity. Generally chronological age may be the main criterion for defining the uninteresting professional on account of age. The English expression “older worker” includes workers aged 40 to 70. Although 40 years may seem too young to be considered an uninteresting worker, the US Age Discrimination in Employment Act designates this age as a legal demarcation in order to protect professionals in this age group from discriminatory or limiting situations within job [3].

Understanding ageism is of particular importance to Latin countries, such as Brazil, since there is evidence in the literature that age prejudice is one of the most accepted forms of prejudice in America [4]. It is noteworthy that, in Brazil, the aging of the population aged over 50 tends to increase from 2045, which should significantly impact the Brazilian labor market. With the aging of the population, therefore, it will be possible to see, in the coming decades, the aging of the workforce, as well as its reduction, causing important economic effects [5].

This study, therefore, addressed the relationship of the individual aged 40 years and the concepts of Brazilian society about these individuals and their work, assuming that such relationship is conflicting and indicates discrimination and social exclusion of these individuals from labor market.

## **2 Theoretical Framework**

According to sociology, organizations are social systems, hence their encompassed activities are governed by sociological laws as well as psychological laws. Similarly, human beings have psychological needs as well as social roles and status. The idea of the social system provides a basis for analyzing organizational behavior issues and helps make organizational behavior problems understandable and manageable [6].

Besides that every human being is different from each other. Corporate managers often forget about human differences, failing to take advantage of them and extracting the best from them. Thus, efficient management is interested in the many skills, competencies and ideas of its employees, which should and can be diverse. While diversity presents many opportunities for organizations, efficient management also works to prevent discrimination and prejudice [3].

Human nature is the social and historical being, as a result of the interaction between man and the social world, that is, man is the product of how his social relations occur, in which work is one of them, including one, quite relevant to the life of the individual [7]. Thus, work has to be part of human needs, social and self-realization, as pointed out by Vergara [7], citing Maslow's theory, which distinguishes two types of human needs, primary and secondary, forming a value-scaled pyramid against needs.

Therefore, the context that involves the work is related to the needs of both primary and secondary human beings. The human being, therefore, has needs related to work, and such needs do not change or are limited in relation to chronological age. These needs are, for example, employment, salary, consumption, belonging to a group, status needs, being recognized, realizing one's potential, challenging tasks. Thus, if the mature individual is excluded from the labor market, he will be depriving himself and becoming frustrated, because he will not have part of his needs met.

According to Jackson and Nakashima (2015), although developed countries are ahead, the aging of the population is global, that is, it is happening in all countries. Thus, although developing countries are still much younger than the rich, it is possible to see a general aging. By 2050 Mexico will have a population as old as that of the United States; and Brazil, Chile, China and Thailand will also have an increase in their number of seniors; and South Korea is expected to compete with Germany, Italy and Japan for the title with the largest elderly population in the world.

Regarding aging, Freitas and Py [1] address the activity theory proposed by Havighurst and Albrecht in 1953 and further analyzed and revised by other researchers. Under this approach, an involved lifestyle is considered important for successful aging. Activity theory proposes that in old age there is a positive relationship between high levels of social participation and life satisfaction. Advocates the idea that, except in cases of significant health problems, people tend to maintain the level of social involvement they had in adulthood or middle age, as their psychological and social needs are quite similar to those experienced in pre-old age. It is further admitted that old age can be an active and productive rather than costly phase.

Associating organizational management in the face of population aging, prejudice and age discrimination play a significant role. When discussing discrimination within institutions, it is important to keep in mind that it is not always intentional but not less negative [8].

The intention to discriminate may not exist and people hardly recognize that they are driven by prejudice, but there may be a discrepancy between ideal and actual behavior. Diversity education programs work by raising awareness of the discrepancy between thinking and acting as one of the ways to bring about change, in order to make individuals aware of their behaviors, as these are not always clearly perceived [9].

For Gingrich [3], this is quite positive because, according to the dissociation model, when individuals become aware of the discrepancy between their ideal and actual behavior, they become motivated to reduce this discrepancy in favor of a more egalitarian behavior. However, the use of this methodology may cause some discomfort, denial and also conflict, deserving some care in its use so that no discomfort occurs and the results are positive.

### 3 Methodology

This study was quantitative and descriptive because it described characteristics of a sample based on statistical analysis of data collected through online questionnaires and using a non-probabilistic sampling. The sample analyzed consisted of 52 individuals of both sexes and referred to professionals who were or were not formally employed at 40 or more years of age.

The technique used for data collection was a questionnaire with multiple choice closed questions, sent electronically to the respondents. The instrument was initially submitted to a pretest and had a self-administered character based on the use of an informed consent (IC). The variables involved in the objectives were translated into this questionnaire consisting of 48 questions, divided into three blocks: (I) socio-demographic questions; (II) the perception of respondents regarding prejudice / and or age discrimination in the workplace; (III) explored the universe regarding the professional relocation of individuals aged 40 or older in the labor market and the relationship with discrimination and / or age prejudice in this process.

Descriptive statistical analysis was performed with the intention of organizing, summarizing and describing a data set. Thus, this research described quantitative characteristics of the studied group, as well as verified if there was association or not between pairs of chosen variables, that is, some pairs of variables considered more interesting for the research objectives were analyzed through statistical tools to verify if there was an association between the variables or if they were independent.

Frequency distributions of grouped data were calculated, as well as graphs and tables displayed for better understanding of the variable in the analyzed data set.

Finally, the Chi-Square Independence Test was applied as a statistical procedure to answer whether or not there was an association between two variables. Several pairs of variables were chosen, according to the research objectives. In each test, the data were classified according to two variables and arranged in a 2X2 contingency table, where each variable could present two levels (attributes) of classification. For example, the variable "age" had two levels (attributes): from 40 to 49 years (level 1) and 50 years or older (level 2); The variable "feeling victimized by prejudice" also presented two levels: yes (level 1) or no (level 2). The significance level adopted was 0.05 and the Microsoft Excel tool was used to perform the statistical analysis of the research in question.

## 4 Results and discussion

### 4.1 Descriptive Analysis

The characterization of the sample showed that the distribution between genders was equitable (26 females and 26 males), and most participants mentioned having lato sensu graduate degree (38%) or higher education (29%). Regarding self-perception regarding their own maturity, most respondents consider themselves to be adult (50%) or mature

(37%). Regarding marital status, 73% are married and 73% of respondents have children, of which 42% have two children and 39% have only one child.

With reference to the time you are in the current job, most responded that they have been in the same job for more than 20 years (49%) or between 10 and 15 years (25%). Still, 32% of respondents said they had transitioned to their current job.

Regarding the position held, most individuals answered either as manager (23%), team leader (13%), senior (8%) or other unnamed function (42%). Of the respondents' sector of activity in recent years, 33% are in the service sector as indicated, 22% in the industry sector, 13% in the public sector, 10% in commerce, while 22% in another type of sector quoted in the question.

About self-concept as a professional, 18% of the answers indicate professional experience as quality, 17% of answers indicate technical knowledge, 16% flexibility, 13% leadership, 12% productivity as quality, 12% a. motivation and 9% indicate updates to new technologies.

Regarding satisfaction with the work performed, 41% of respondents feel fully satisfied, 35% relatively satisfied, 11% feel dissatisfied, 8% disappointed and 1% did not answer this question. Regarding satisfaction with remuneration, most respondents (48%) feel relatively satisfied, 17% dissatisfied, 15% fully satisfied.

Regarding satisfaction with relationships in the workplace, 13% did not respond and, of those who answered, most were satisfied, 39% were relatively satisfied and 26% fully satisfied, 33% felt some degree of dissatisfaction (dissatisfied or not satisfied). Concerning equal career opportunities, 13% did not respond, and 35% of respondents felt relatively satisfied, 17% fully satisfied, while 24% were unhappy and 17% dissatisfied.

Regarding the possibilities for professional career growth, 10% did not answer this question, and of those who answered, 53% had some degree of dissatisfaction, 21% felt unsatisfied, 23% dissatisfied and 9% disappointed, while 47% had some degree of satisfaction, 32% feel relatively satisfied and 15% fully satisfied. Of the current professional activity, 56% are employed, 10% are entrepreneurs, 8% are self-employed, 8% are looking for a new job, 4% are retired and no longer working, 2% are retired and continue working, and 13% are in a situation that could not be defined on this issue.

Most respondents (54%) find it easy and natural to reconcile their career with their personal lives, while 37% find it difficult to reconcile. Regarding the age you would like to work in, most respondents said they would like to work up to 60 years old: 38%, 15% up to 65 years old, and 21% until they are healthy for it.

In order to infer about prejudice and/or age discrimination in the work context, it was noticed that when asked about the average age of their managers / superiors, most answered that their managers are between 51 to 60 years old (38%), 41 to 50 years old (20%), over 60 years (14%). Also, in 33% of the cases it was indicated that the subordinates are between 33 and 40 years old, 31% of the answers were 25 to 32 years old.

Regarding the company where they work, about the most frequently contracted age groups, the answers indicate that 36% are between 25 and 32 years old, 25% between 33 and 40 years old and 17% between 18 and 24 years old.

About the opinion of respondents of which age groups they consider to be most underprivileged in hiring at the company where they work, most often appeared from 51 to 60 years (35%), over 60 (21%) and 41 to 50 years (14%).

Regarding the reasons that lead most to layoffs in the work of respondents, most of the time, the financial crisis in the company with 23%, low employee productivity with 21%, or difficulty adapting to organizational changes with 16% appear as answers.

When asked if there is prejudice in the job market with older professionals, the majority of respondents said they think there is a lot of prejudice (82%), 18% believe that there is little prejudice. Thus, it is possible to realize that, to a greater or lesser extent, all respondents believe that prejudice exists to some degree. No individual answered that there is no prejudice, and one individual did not answer that question.

Regarding feeling victimized by some kind of age prejudice in the work context (in the workplace, company or labor market), 62% answered no, but 37% answered yes. Still for those who answered yes, when asked if this triggered some kind of psychological problem, such as depression or excessive irritability, 68% report no, while 32% say yes.

On the part of those who suffered the discrimination and / or prejudice mentioned in the previous situation, 31% of the time appear the superiors, 28% of the time appear the human resources sector, 25% the internal policies of the company.

Regarding what may hinder or hinder the relocation process after age 40, 43% of the responses cited are “too many competitors”, while 26% “age”, 13% “other”, indicating another reason that was not mentioned, 9% the “lack of preparation on their own” and the other 9% of the answers to “lack of updating on their own.”

## 4.2 Inferential analysis

The Chi-square Independence Test was applied to verify whether or not there was an association between two variables in some chosen pairs of variables, which indicated closer proximity to the research objectives.

Results show that for the sample of 52 respondents “age” is not associated with any of the following variables: “victim of prejudice” ( $p=0.179$ ), “prejudice against older people” ( $p=0.953$ ), “physical ability of older” ( $p=0.953$ ) or “equality of opportunity” ( $p=0.404$ ), showing that the response profile corresponding to each of these variables does not depend on the age groups studied. Thus, there is no significant difference between the response profiles between those aged 40-49 and those aged 50 and over. Nevertheless, the independence observed between these pairs of variables had no implication in the respondents' perception regarding prejudice, physical ability or equality of opportunity, whose descriptive analysis has been presented previously. As for the pair of variables “gender” and “victim of prejudice”, no association is observed either.

On the other hand, it is interesting to note that the variables “job satisfaction” and “job satisfaction” are clearly associated ( $p = 0.006$ ). Finally, for the variables “there is prejudice” and “victim of prejudice”, strictly speaking there is no association, although it is observed that the descriptive level is close to the test threshold ( $p = 0.052$ ).

For the subsample of the 18 who were relocated, there is no association between “age” and “difficulty in re-employment”. However, for the variables “gender” and

“difficulty in re-employment”, it is interesting to note that there is an association ( $p = 0.019$ ). That is, although the perception of the difficulty of new employment does not depend on age, this perception is shown to be gender dependent.

On the other hand, the variable “gender” was not associated with any of the following variables: “health impact”, “self-esteem regarding relocation” or “psychological help”. Finally, it was possible to detect an association between “difficulty in re-employment” and “impact on health” ( $p = 0.006$ ) and also between “difficulty in re-employment” and “self-esteem in relocation” ( $p = 0.017$ ).

## 5 Conclusion

This study addressed issues related to “aging and work” and achieved its objectives, both by verifying the perceptions of professionals aged 40 and over, about prejudice and / or age discrimination in the work context, as well as analyzing the challenges they face when need to relocate professionally in the labor market.

The conclusions related to the research problem (“What is the perception that professionals with 40 or more years old have about prejudice and/or age discrimination at work?”) show that there is discrimination and prejudice against mature professionals in the Brazilian work context, considering the sample studied.

Regarding the results of the descriptive statistical analysis regarding the frequency calculations, it can be said that the perception of professionals aged 40 or older regarding prejudice and / or age discrimination at work was that there is prejudice at work in relation to professionals. older, because 68% of respondents believe that to some degree there is prejudice, among which: 32% believe there is a lot of prejudice and 32% little.

Regarding the perception of respondents if there is prejudice in the job market with older professionals, the perception was positive, as 82% of respondents said there is a lot of prejudice and the others, 18%, think there is little. Thus, it was possible to verify a totality, that is, 100% of respondents believe that, to some degree, there is prejudice. No individual answered that there is no prejudice, and only one failed to answer that question.

In specific situations, respondents cited that they felt discrimination and / or prejudice in the following situations: not being hired due to age (29% of the time); have stopped attending training (22% of the time); have been fired or forced out because of their age (15%); not being promoted because of their age (7%) and having received a below average salary or salary proposal (10%).

The inferential analysis indicated that “age” is not associated with the variables “victim of prejudice”, “prejudice against the elderly”, “physical ability of the elderly” or “equality of opportunity”. There was also no association between the variables “gender” and “victim of prejudice”. On the other hand, an association was found between the variables “job satisfaction” and “job satisfaction” ( $p = 0.006$ ). Regarding the variables “there is prejudice” and “victim of prejudice”, the descriptive level was close to the threshold ( $p = 0.052$ ).

Finally, the finding of association between some variables by the Chi-Square Test leads to future studies of the relationship between these and the issues related to the

profession. For example, the association between “gender” and “difficulty in getting a new job”, which motivates a study focused specifically on gender.

## References

1. Freitas, E. V., PY, L.: Tratado de geriatria e gerontologia. Ed. Guanabara Koogan, Rio de Janeiro (2016).
2. Castro, G. S.: Precisamos discutir o idadismo na comunicação. *Comunicação & Educação*, 20(2), 101–114 (2015).
3. Gingrich, B.: Individual and organization accountabilities reducing stereotypes and prejudice within the workplace. *Diversity Factor*, 8, 14–19 (2000).
4. Hedge, J. W., Borman, W. C., Lammlein, S. E.: The aging workforce: Realities, myths, and implications for organizations. American Psychological Association, Whashington (2006).
5. Camarano, A. A.: Novo Regime Demográfico – uma nova relação entre população e desenvolvimento? Instituto de Pesquisa Econômica Aplicada, Rio de Janeiro (2014).
6. Labianca, G., Brass, J. D., Gray, B.: Social Networks and perceptions of intergroup conflict: The role of negative relationships and third parties. *Academy of Management Journal*, 41(1), 55–67 (1998).
7. Vergara, S. C.: Gestão de pessoas. Ed. Atlas, São Paulo (2006).
8. Phillips D. R., SIU, O.: Global Aging and Aging Workers. In: Hedge, J. W., Borman, W. C. *The Oxford Handbook of Work and Aging* (Oxford Lybrary of Psychology). London University Press, London (2012).
9. Posthuma, R. R., Wagstaff, M. F., Campion, M. Age Stereotypes and Workplace Age Discrimination. In: Hedge, J. W., Borman, W. C. *The Oxford Handbook of Work and Aging* (Oxford Lybrary of Psychology). London University Press, London (2012).