

Exiting the labour market early: retirement or discrimination?

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Abstract *Several studies show that despite a decline in mortality and improvements to health conditions, workers have left the economic activities early. The literature associates precocious exit from the labour market to the widespread coverage of Social Security. One alternative to contain the fiscal imbalance in most countries has been to postpone the minimal age to be entitled to a pension benefit. Nevertheless, many studies suggest the existence of barriers that make it difficult for older workers to remain in economic activity. Among them are prejudices among employers. This paper aims to understand the non-participation of Brazilian men aged 50-64 in economic activities. The focus on this age group is because they would be the first group to be affected by the pension reform proposed by the Government. These are those who are neither in the labour market nor retired (neither-nor). The proportion of these men of the total number of men in this age group increased from 3.5% to 10.2% between 1984 and 2015. Very low schooling and worse health conditions compared to other men can contribute to difficulties for insertion. This suggests discrimination in relation to the older worker and the lack of public policies aimed at reinforcing the ability of these individuals to obtain a job.*

Key words *Labour market, Social security, Neither-nor, Discrimination*

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Introduction

Some of the challenges brought on by an ageing population are an imbalance in social security accounts and a change in epidemiological profile. National and international studies show that, despite a decline in mortality rates and improvements in health conditions, workers have entered economic activity later and left earlier. They enter later since they spend more time at school and left earlier because they retire earlier. The change in epidemiological profile of the Brazilian worker has led to an increase in disability retirement. According to The Social Security Statistics Report (Anuário Estatístico da Previdência Social) (AEPS/Infologo), available through the Labour and Social Security Ministry (Ministério do Trabalho e Previdência Social)¹ the number of benefits awarded annually went from 64,000 in 1992 to 211,000 in 2017.

A longer life would be expected to increase the returns on investments in human capital and the years spent in economic activity. Bloom *et al.*² believe that low fertility rates can lead to a better qualified workforce in the future, since having fewer children would allow parents to invest more in the health, cognition and education of their children. This would result in more productive adults. A longer life together with improvements in health conditions may lead people to plan on working for longer. This decision depends on health conditions as well as the value of the retirement benefit, savings, schooling, type of occupation (more or less physically demanding), and of course labour market conditions^{3,4}, amongst others.

There is ample literature which associates early exit from the labour market to the expansion of social security coverage^{3,5-9}. This takes place despite Brazilian social security legislation permitting retirees to return to the labour market without any restrictions, thus reducing the impact of “early” retirement. Camarano and Fernandes¹⁰ showed that, between 1982 and 2014, the life expectancy of Brazilian men aged 16 increased by 3.4 years while the time spent in economic activity decreased by 3.1. Estimates by Queiroz and Ferreira⁴ point to a twofold increase in the time Brazilian men spend in retirement from 1980 to 2025. This could increase by 5 to 10 years in the period.

Delaying retirement has been considered as an alternative to contain the fiscal imbalance of most countries, including Brazil. The retirement benefit aims to replace one’s income when the

ability to work is lost, but when this takes place is unknown except in the case of disability. In general, an age is presumed. It is understood that differences should exist for different occupations, genders, social and racial groups. For some occupations more exposed to toxic agents or unhealthy conditions, legislation sets different times of contribution.

The increase in the minimum age as well as the increase in contribution time leads to a need to understand the capacity/ availability of the labour market to absorb these workers, as well as the conditions of the workers who remain active longer. Many studies suggest the existence of barriers which make it difficult for the older worker to continue in economic activity. Amongst which, some quotes prejudice on the part of employers. For the OECD¹¹, these tend to have a negative perception of these workers due to their difficulty in adapting to technological and organisational changes, labour costs, which increase more with age than does productivity, and for the difficulties many companies may face in adjusting the work conditions to labour legislation. Lahey¹² and Neumark *et al.*¹³ found evidence of workforce discrimination against older women in the United States, which makes it more difficult for them to find a new job if they lose theirs or wish to change.

It’s common to assume that an ageing workforce could lead to slower productivity growth. Research in European countries analysed the relation between an ageing workforce and productivity between 1950 and 2014. An increase of 5% in participation of workers between 55 and 64 was found to be associated with a 3% decrease in productivity. Total productivity growth in the Euro area was projected to be 0.8% per year. This could be 25% higher (1% per year) if not for ageing¹⁴.

Prejudice against older Brazilian labour can be inferred due to growth in the number of men between 50 and 64 who were neither working nor retired (nether-nor) from 1992 to 2015. They went from making up 3.5% of the total of men in this age group to 8.2%. Those with lower levels of education predominate¹⁵.

Lower education levels of the older economically active population (EAP) may be a barrier to continuing in economic activity due to the type of activity undertaken by those with lower education levels. This is reinforced by new technologies which impact workers differently. According to the OECD¹¹, 40% of workers without a high school education are in jobs more likely to be dis-

carded by new technologies, while less than 5% of those with a University degree face this risk. Furthermore, in all countries studied, exiting the labour market tends to be permanent; few workers return to economic activity. This same report emphasises that the probability of hiring a worker aged 50 or over is less than half of that for workers between 25 and 49 years. This suggests not only discrimination against older workers, but also a lack of public policies aimed at reinforcing the capacity of these individuals to obtain a new job.

The objective of this paper is to try to understand the non-participation of men aged 50 to 64, here referred to as mature, in economic activities. The focus on this age group is because it will be the first affected by the recently pension reform proposed by the government. These may be retirees who do not return to the labour market or the neither-nor, who are neither retired nor participate in the labour market. In this paper, a more detailed analysis will be done only for the neither-nor. The data used comes from National Household Survey (Pesquisas Nacionais por Amostra de Domicílios) (PNADs) from 1992 to 2017. In 2012, the methodology of this research changed radically and has made a temporal comparison more difficult. The previous research continued until 2015 together with the new -Continual PNAD¹⁶. Since health conditions are important in determining this participation, supplementary data on health conditions obtained by PNADs from 1998, 2003 and 2008 were taken into consideration, as well as the National Health Research (Pesquisa Nacional de Saúde) (PNS) of 2013, also undertaken by the Brazilian Institute of Geography and Statistics (IBGE).

This paper is divided into five sections, the first being this introduction. The second traces a panorama of the participation of Brazilian males aged 50 to 64 in economic activities. The third details some characteristics of the neither-nor. Using a logistical model, the fourth section aims to understand what makes a man become a neither-nor. The fifth section presents the final considerations.

The Brazilian experience

General view

Since the interest of this paper is on the viability of an older individual participating in economic activity, the activity rates of the male population are analysed in Graph 1, disaggregated into five-year age groups. In this case, individuals working or looking for a job are considered.

These rates refer to the period 1992 to 2017 and are calculated using data from annual and continual PNADs. The years without data are due to the PNAD not undertaking fieldwork. The consistency in tendencies shown by the two studies is notable.

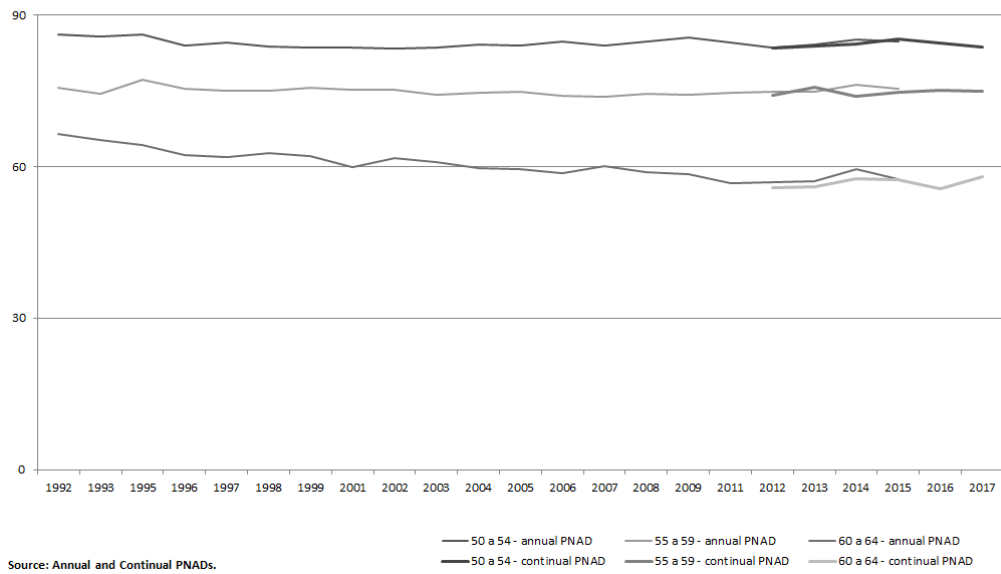
During the period analysed, the rates for the groups 50-54 and 55-59 years were approximately constant according to the two sources, around 85% and 75% respectively. According to estimates of the authors, life expectancy at the age of 50 and 55 increased by 5.8 and 5.6 years respectively between 1992 and 2015. Rates of the 60-64 age group showed a slightly declining tendency, reaching 58% in 2017; life expectancy of this age group increased by 5.4 years in the period.

Camarano et al.¹⁷ compared the Brazilian experience with that of some European and Latin American countries and concluded that the rates of participation of Brazilian men are lower than those found for men from the countries compared, in all age groups. The highest rates were found in Japan and Chile.

Out of economic activity: the neither-nor and the only retired

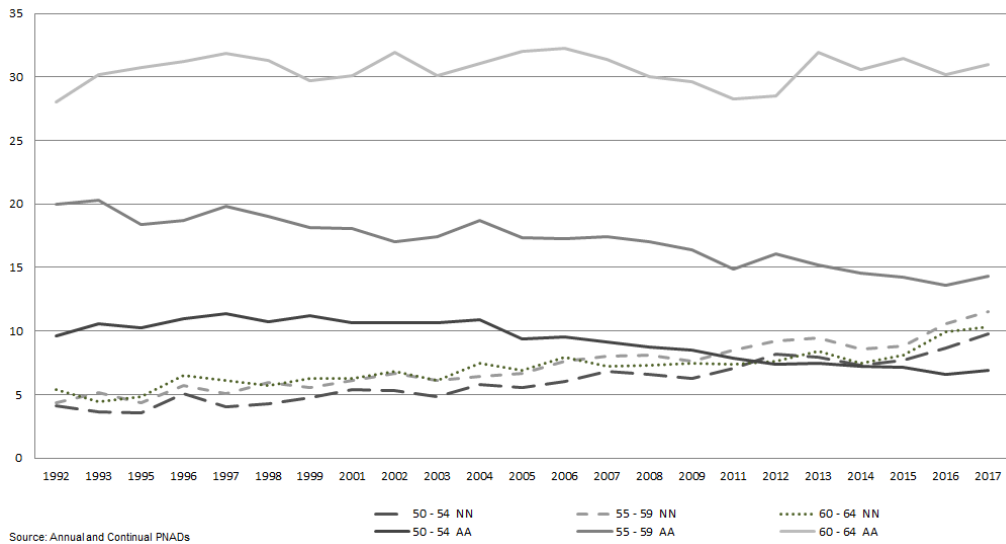
This subsection aims to identify who the inactive mature men are, that is, those who are out of the labour market. From the point of view of institutions which regulate life course, men in this age group should be working or retired. Graph 2 shows the percentages of men between 50 and 64 who are not retired and do not participate in economic activity (neither-nor), as well as retirees who do not work. The neither-nor percentages show high growth; more than twofold in the period. In 1992 men aged 60 to 64 who showed the highest percentage (5.4%); in 2017, the 50-59 age group. From the total of mature men, 10.5% were in the neither-nor category.

Another group which is out of economic activity are the retirees who do not work, referred to here as only retired. In 2017, 15.8% of men between 50 and 64 found themselves in this condition. Graph 2 shows that, contrary to what happens with the neither-nor, the only retired percentage decreased for the 50-59 men and showed a slight increase for those of 60-64. The reduction of this proportion suggests a postponement in exiting the labour market and/or difficulties in retiring. This may explain part of the neither-nor increase. In both cases, it is likely that part of these individuals are discouraged unemployed, who even do not look for a job.



Graph 1. Activity rate of male population according to age groups, Brazil.

Source: Annual and Continual PNADs.



Graph 2. Percentage of males aged 50 to 64 years as neither-nor (NN) and only retired (OR) according to age groups, Brazil.

Source: Annual and Continual PNADs.

The unemployed are considered as participating in the labour market; the increase in the percentage of unemployed men aged 50 to 64

looking for a job is notable. They made up 4.3% of this group in 1992 and 6.7% in 2017. The neither-nor, the only retired and the unemployed

made up 33.0%, or one third, of mature men. If the unemployment rates continue to increase, part of the unemployed are expected to migrate to the neither-nor or, if they have reached a historical of contributions, request retirement. This leads to the consideration that early retirement is not always a choice and can result in difficulties for mature workers, such as social exclusion and barriers to acquiring an adequate retirement income. Therefore, policies which help workers remain in economic activity longer can also have a direct impact on their well-being.

The neither-nor men

This section aims to describe who the neither-nor men are. The variables considered are age, education, health conditions and race/colour. In 2017, approximately 70% of the neither-nor men were younger than 60; this proportion has not changed significantly over the period analysed.

There is practically a consensus that a longer life requires longer and better professional careers. The percentage distribution of the neither-nor from 50 to 64 years of age by education level is shown in Graph 3. Most of these men had not completed primary school. Although this proportion decreased from 90.5% to 76.5% in the period considered, it was still responsible for three quarters of the total. The reduction in the mentioned proportion was compensated by the increase in those who had completed primary school and high school, especially the latter. The data makes clear the importance of low education levels for the category. It acts as an obstacle to increased productivity and, consequently, can lead to employer prejudices. Furthermore, older and less qualified workers may feel undervalued and unmotivated to improve qualifications or look for work. For the OECD¹¹, the attendance of training programmes decreases with age, which suggests low expectations regarding returns on investment. In addition, schooling and health conditions are closely related

Health conditions are also considered here, assuming they have an important impact on the permanence of an older individual in economic activity. The World Health Organisation (WHO) defines an ageing worker as one who is 45 years of age or more. Starting at this age, losses of some functional capacities are assumed to accentuate if preventive measures are not adopted, or if working conditions are not adequate. In general, the main health problems to afflict workers are musculoskeletal and mental disorders, especially

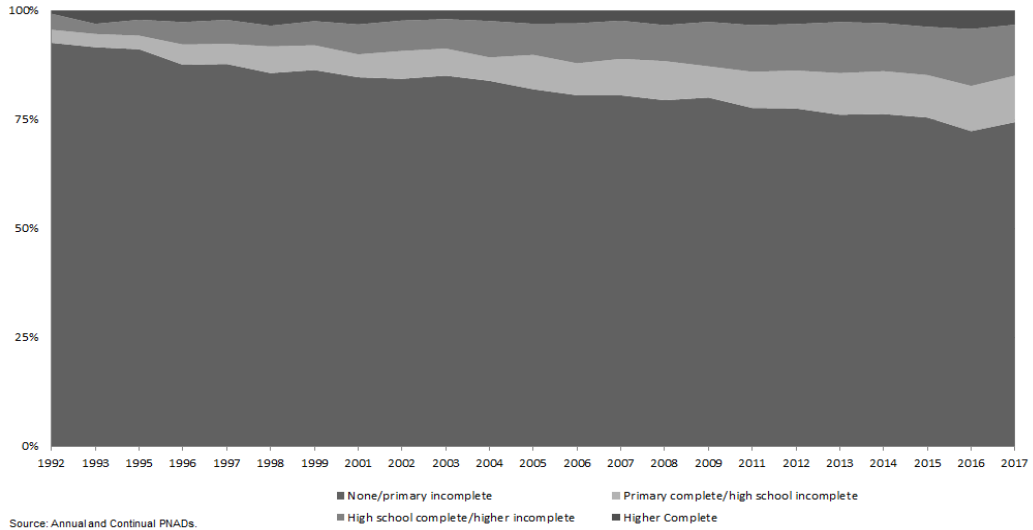
depression. Inadequate working conditions can lead to physical, chemical, biological or organisational risks, which may also lead to an early exit from the labour market.

It was observed an improvement in health conditions for those aged 50 to 70 year in Latin America recently^{18,19}. It has also been noted that now many occupations demand less physical strength^{20,21}. This combination can lead to an increase in labour market participation of the older population. Despite this improvement not resulting in higher rates of participation, it may lead to age no longer being a work barrier for the older population²².

Castro et al.²³ analysed the factors associated to the perception of work capacity in a sample of the Brazilian population aged 50 years of age or older. Among the male participants, 49.4% reported good capacity; females 48.6%. This is positively correlated with good health and schooling and inversely correlated with age, a diagnosis of depression and having at least one chronic disease. Since the new cohort of older workers will be higher educated, it is probable that this will result in a longer permanence and lead to, as well, an increase in productivity and better health conditions and autonomy.

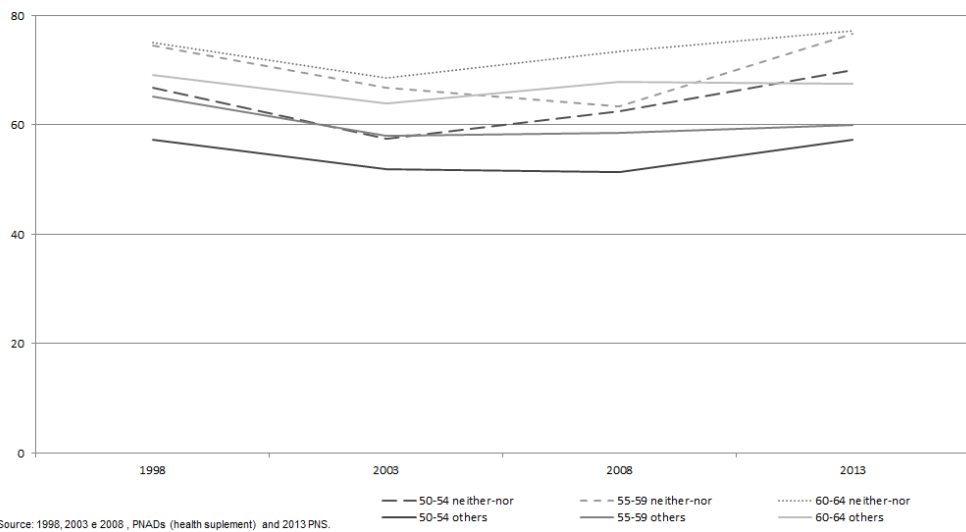
Two indicators were considered to evaluate change in health conditions: the proportion of men aged 50 to 64 years who evaluate their health as excellent or good and the proportion who declared having at least one chronic illness. The years considered were 1998, 2003, 2008 and 2013, which are the years for which this information is available in the special health supplements of PNADs and the National Health Research (PNS) of 2013. In regards to evaluating health conditions, Camarano et al.¹⁷ observed that these conditions declined with age and did not alter during the studied period; except for the 50 to 54 group which showed a slight improvement. Compared to the rest of the population from the same age group, the authors showed that the neither-nor presented worse conditions than the rest.

The other indicator considered was the proportion of individuals who declared having at least one chronic illness. This is presented in Graph 4 by age groups, for the four years in which the information is available and compared to the rest of the population from the same age group. The indicators here point to an increase in the proportion of neither-nor who declare having at least one chronic disease during the period considered. This is true for all age groups. The comparable proportion for the other category remains



Graph 3. Proportion distribution of neither-nor males aged 50-64 according to schooling, Brazil.

Source: Annual and Continual PNADs.



Graph 4. Proportion of males aged 50 to 64 years who reported having at least one chronic disease according to categories, Brazil.

Source: 1998, 2003, 2008, PNADs (health supplement) and 2013 PNS.

roughly constant. The neither-nor report worse health conditions than the general population.

Camarano et al.¹⁷ also analysed the distribution of neither-nor by race/colour. Whites, bla-

cks, mixed-race and “others” (native Indians and Asians) were contemplated. In 1992, the majority of the neither-nor were white, 57.6%. This proportion decreased during the period as the participation of blacks and mixed-race increased, which may be partially explained by improvements in colour declaration. In 2017, 64.1% of the neither-nor were mixed race or black.

In summary, the mature neither-nor were concentrated in the 50 to 59 age group, had very low levels of education, reported worse health conditions than other groups and were over represented among the mixed-race and black populations.

What leads a mature man to become a neither-nor?

This section presents the results of a logistic model, which measures the effect that specific characteristics have on the chances an individual over 50 years of age has of becoming a neither-nor. For this, some variables were chosen and grouped into three groups.

1) Sociodemographic:

continual age;

education divided into four categories: i) none/primary incomplete; ii) primary degree/high school incomplete; iii) high school degree/University incomplete; and iv) University degree; and

race divided into two categories: i) white; and ii) not white (black, mixed-race, Asian and native Indian).

2) Health:

self-perception of health divided into two categories: i) good health includes those who declared their health condition as very good or good; and ii) the other categories includes those who declared not having good conditions; and

the proportion of individuals who declared having at least one chronic illness: i) no; and ii) yes.

3) Household:

continual per capita household income;

position in the household divided into four categories: i) head of household; ii) spouse; iii) son/daughter; and iv) other relative; and

household with children under 16 and/or elderly aged 80 or more divided into two categories: i) no; and ii) yes.

All these variables were calculated for each individual. Table 1 shows the results of the estimated coefficients (B) for the variables, the parameters which were interpreted as odd ratios and their confidence intervals.

The chances of a man becoming neither-nor reduces by around 2% with the advance of age, which may be related to the possibility of becoming a social security beneficiary, be it as a contributor or non-contributor. The education level of the individual was not shown to be significant for all categories. A factor which may have contributed to this result is a lack of representation of the target audience in designing the research and in the study profile. It is therefore recommended that this variable be considered in other studies for a more detailed investigation. Another variable not found to be significant is race/colour. But in both cases the signals are in the expected direction. Higher education, less chance of being neither-nor; no white, higher chance.

In regards to health conditions, having at least one chronic disease increases the chances of a male individual becoming neither-nor by 1.7 times. The variable self-perception of health was not shown to be significant. Average per capita household income presented a small effect on the chances of an individual becoming neither-nor (0.02%). Being the head of the household or spouse reduces the chances of an individual becoming neither-nor by 62.2% and 57.5% respectively. The last variable considered was the presence of children and/or older adults in the household, which presented a negative coefficient. It is possible that the presence of dependent individuals in the household requires more men to work or look for a job to help them.

Final considerations

The participation of mature Brazilian men in economic activities is low compared to international experience. It seems that the unemployed are forced to retire early or suffer discrimination in the labour market. The model showed that having a chronic illness contributes to the difficulty of entering the market. Education level was not significant, but likely plays an important role. The only-retired group was not analysed; therefore, it is not known why they did not return to economic activity. This may have happened due to physical or mental disability, or to a feeling of discrimination.

The importance of remaining longer in the labour market is due not only to challenges brought by social security pressures, but also to the negative impacts that an early exit from the labour market has on individuals, especially on males. In other words, it can result in the loss of a

Table 1. Odd ratios for males aged 50 and plus of becoming a neither-nor and their confidence intervals (CI). Brazil, 2013.

Variables	β Coefficient	Odd Ratios	IC 95%	
			Bottom	Higher
Sociodemographic				
Age	-0.0182	0.9820	0.9670	0.9973
Scholling				
None/ primary incomplete				
Primary complete/high school incomplete	0.4853	1.6247	1.0586	2.4936
High school complete/higher incomplete	0.1377	1.1476	0.7768	1.6953
Higher complete	1.3818	3.9821	1.5264	10.3888
Race				
White				
No white	-0.0201	0.9801	0.7473	1.2853
Health				
Self perception				
Good				
No good	0.0201	1.0203	0.7764	1.3409
Chronic disease				
No				
Yes	0.5637	1.7572	1.2922	2.3896
Household				
Continual percapita household income	-0.0023	0.9977	0.9968	0.9986
Position in the household				
Head	-0.9730	0.3780	0.2260	0.6320
Spouse	-0.8547	0.4254	0.2439	0.7420
Son/daughter	0.7082	2.0304	0.7953	5.1838
Other relative				
Household with children under 16and/or elderly aged 80 or more				
No	-0.7961	0.4511	0.3369	0.6039
Yes				

Source: IBGE/PNS 2013.

Author's elaboration.

social role, leading to depression and alcoholism as well as a decrease in income, thus affecting the consumer market.

It is notable that income replacement policies, such as social security, assume arbitrary criteria for the loss of labour capacity, which does not take into account the employability of the older worker. It is without doubt important to establish a minimum age for retirement, not only for financial issues but because the current demographic regime will result in a large propor-

tion of the workforce being comprised of older workers. This emphasises the importance of eliminating barriers imposed on the participation of these people in economic activity, be it due to low qualifications or to disability.

Discrimination against the work of older people is an important matter in determining their permanence in the labour market. "Age discrimination is the antithesis of active aging. This form of exclusion is not only unjust, but is an economic waste"²⁴.

Collaborations

AA Camarano: text elaboration, conception, methodology and final writing. DF Carvalho: worked on data tabulation, graphing and table assembly. S Kanso: methodology and final essay.

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