

Gender and age do not influence the ability to work

Rosimeire Simprini Padula^{a*}, Luciana do Socorro da Silva Valente^a; Mônica Vasconcelos de Moraes^a,
Luciana Dias Chiavegato^a, Cristina Maria Nunes Cabral^a

^a Masters in Physical Therapy Program, Universidade Cidade de São Paulo, R. Cesário Galeno, 448, São Paulo, Brazil.

Abstract. Work capacity is related to physical, environmental and psychosocial factors and is influenced by individual characteristics and occupations. The aim of this study was to evaluate the relationship between work capacity, gender and age. 360 people employed at an institution of higher education of both genders and similar age were asked to participate in this study. The ability to work was analyzed using Work Ability Index (WAI). Descriptive statistical, Pearson correlations and ANOVA test was applied. Of these, 197 workers who participated in the study completed and returned the questionnaire. The results show there weren't any significant differences between work ability in relation to gender and age, but we observed an increase in variability of responses for WAI score in older workers. No significant differences in the perception of the ability of work between men and women.

Keywords: Aging, Work ability, Occupational Health

1. Introduction

The demand in the workplace has increased with the advent of technology, minimizing the physical burden, but expanding the mental demands^[4]. The mental and somatic symptoms have increased exponentially among workers, and directly influenced the ability to work^[7].

The ability to work is related to the ability of the individual to perform its tasks in accordance with the requirements of the job, their health and their physical and mental abilities, also representing a measure of functional aging^[1]. It can be regarded as resulting from a dynamic process between the individual resources in relation to his work which is influenced by several factors, including lifestyle, socio-demographics, the aging process and work demands^[13].

Among the various factors, health is considered a major determinant of work capacity^[5].

In Brazil about 70% of the population suffers from excess demand and pressure and this translates into health problems including insomnia, difficulty to concentrate, excessive or lack of appetite, muscle

aches, fatigue, anxiety and pressure^[6]. The incidence of deficiency of these problems is higher among young adults, with women being the most affected^[8].

The result is related to work capacity and is a dynamic process between the individual resources in relation to their work, and the influence of various factors such as sociodemographic characteristics, lifestyle, aging process and work requirements^[9].

The workers knowledge of its real capacity for work is essential to create secure conditions of employment, especially when the job requires great physical effort^[2]. But there are other situations that reflect this inability, the natural aging, for example, causes the individual to have the perception of being less able to their jobs, than a few years ago. To understand this complexity, it requires an assessment based on data obtained from different sources, including the worker himself.

The aim of this study was to evaluate if work ability perception that is influenced by age and gender

* Corresponding author. E-mail: rosipadula@gmail.com.

2. Methods

This cross-sectional study was qualitative and included 360 employees of an institution of higher education. The survey consisted of the questionnaire Work Ability Index (WAI) [5]. We used the translated version, adapted and tested for the Portuguese language [9].

The questionnaire was sent to workers in close envelope, containing information about the study and informed consent which was signed and returned together with the questionnaire and agreement to participate. Once accepted to participate and complete the enclosed questionnaire returned.

2.1. Work Ability Index (WAI)

The Work Ability Index (WAI) is an instrument developed by the Finnish Institute of Occupational Health, to evaluate how the worker is able to perform their work now at present and in the future. The conclusion of the evaluation is made based on answers to a series of questions, considering the physical and mental demands of work, health status and resources of the worker. The final score ranges from 7 to 49 points demonstrating the worker's own perception about his ability to work.

The questionnaire includes questions concerning the intensity with which stress is experienced. And involves stress in the work environment ergonomic, organizational and psychosocial stressors.

It consists of seven items; each comprising one, two or three questions and each answer is credited with a score. The score for item 2 (ability to work in relation to the demands of work) is weighted according to the work which is primarily physical, mental or both depending on the function of the individual.

The result achieves a score from 7 to 49, depicting the concept of the worker himself in relation to his ability to work.

2.2. Data analysis

To analyze the categories on Work Ability Index analysis are: poor (7-27 points), moderate (28-36 points), good (37-43 points) and excellent (44-49 points). The group was divided by age (18-30; 31-40; 41-50; 51-60) and gender.

The Statistical Package for Social Sciences (SPSS) software version 13.0 was used for statistical analysis, and significance was set at 5% ($P < 0.05$)

Descriptive statistical analysis was applied (mean, SD, 95% confidence interval for mean), Pearson correlations and ANOVA test.

2.3. Ethical aspects

All subjects were informed of the objectives and procedures of the study and were invited to participate by signing an informed consent form that had been approved by the local ethics committee (Proc. N° 0048.1.186.000-10).

3. Results

Of all workers invited to participated 197 returned the questionnaire answered by an institution of higher education in Brazil. The mean age was 30.26 ± 8.70 years, 64% female and 36% male. The descriptive analyses from the group in Table 1.

Table 1. Relationship between age group and work ability

Age (years)	Mean (SD)	95% Confidence Interval	Median
18 - 30	40,81±5,17	39,82 - 41,80	42
31 - 40	40,04±7,90	37,61 - 42,48	40
41 - 50	40,50±5,71	36,82 - 42,17	41
51 - 60	36,83±6,44	20,81 - 52,85	35

The female group perceived ability to work as good and moderate. Male rated excellent in greater proportion than women (Figure 1).

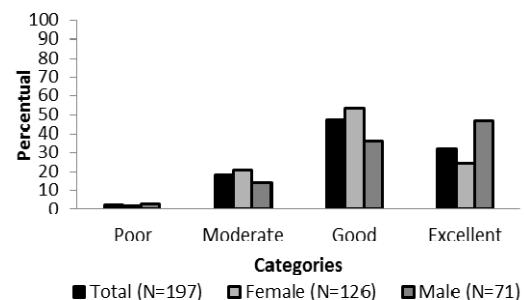


Figure 1. Distribution of classification of the categories WAI for group

The evaluation for both groups together shows that there was a sense of good and excellent ability to work (Figure 1).

There wasn't any correlation between WAI and Age group ($r = 0.01$, $P = 0.89$) or between Gender and WAI ($r = 0.15$, $P = 0.03$). There wasn't significant difference among WAI and age group or gender ($P > 0.05$).

4. Discussion

In this study, age and gender did not influence the perception of ability to work, unlike what has been observed in other studies. It may be that the concern about losing his job is a factor considered when answering the questionnaire and that may have influenced the responses, even though the workers were not identified by name.

However, the descriptive statistical analysis shows an increase in the confidence interval, the final score of the WAI with increasing age and a decrease in mean and median.

The perception of ability to work despite having no significant difference with increasing age should be monitored and evaluated by means of complementary instruments, and is also a suggestion for future studies^[11].

The individual functional assessment would be a way to better understand the physical capacity of the worker. In general, the more specific demands tend to have repercussions for the older workers, and may have an impact on health, although these effects also vary significantly among age groups^[12]. This is because of the individual aspects of the work such as the inclusion of functional assessment and the characteristics of the activity.

In this study there was no significant differences between men and women, although there is evidence that male gender think that they have the ability to work better than female^[10,3]

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