DETECTION AND ANALYSIS OF THE FACTORS THAT INFLUENCE HUMAN DE-VELOPMENT AND WORKABILITY OF WORKERS

DETECÇÃO E ANÁLISE DOS FATORES QUE INFLUENCIAM O DESENVOLVI-MENTO HUMANO E A TRABALHABILIDADE DOS TRABALHADORES

Pamela Adelino Ramos * Felipe Araujo Pereira **

ABSTRACT

With the complications caused by the worsening of the pandemic caused by the coronavirus, which started in 2020, where several sectors had their activities interrupted or even paralyzed, several employees had their working hours reduced or interrupted, forcing them to find alternatives to reposition themselves in the workplace. labor market. In this context, the term workability can be mentioned, which, according to Maltby (2011), aims to improve the quality of work, encouraging better mental and bodily health, relating the work environment with the personal environment. The main objective of this study was to identify and analyze factors that influence human development and workers' workability. After multivariate analysis, using the SPSS software, it was possible to identify two main factors that correspond to the presented study. The first factor identifies characteristics linked to the personal development of workers, while the second factor refers to questions about suitability and job satisfaction as determining factors in the professional development of workers. The importance of satisfaction as a criterion for professional improvement was also observed. This research also contributes to a better interpretation of the relationship between employer and employee, in addition to enabling different perspectives on the appreciation of technical and interpersonal skills such as improvement in the work process, professional appreciation and capture of new technical and emotional skills to better perform the work, and generate value through these.

Keywords: work ability; employment; COVID-19; factor analysis.

RESUMO

Com as complicações causadas pelo agravamento da pandemia provocada pelo coronavírus, iniciada no ano de 2020, onde diversos setores tiveram suas atividades interrompidas ou até paralisadas, vários colaboradores tiveram suas jornadas de trabalho diminuídas ou interrompidas, forçando-os a encontrar alternativas para se recolocar no mercado de trabalho. Nesse contexto, pode-se citar o termo trabalhabilidade, que tem como objetivo, segundo Maltby (2011), melhorar a qualidade do trabalho, incentivando uma melhor saúde mental e corporal, relacionando o ambiente de trabalho com o ambiente pessoal. Esse estudo teve como objetivo principal identificar e analisar fatores que influenciam o desenvolvimento humano e a trabalhabilidade dos trabalhadores. Após análise multivariada, utilizando o software SPSS, foi possível identificar dois fatores principais que

^{*} Academic title: Post-doctorate in Production Engineering from the UFPB. Affiliation: Federal University of Paraíba, UFPB, Brazil. Email: pamela@ccsa.ufpb.br ORCID: https://orcid.org/0000-0002-2383-5372

^{**} Academic title: Bachelor in Business Administration from the Federal University of Paraíba. Affiliation: Santo Agostinho University Center, UNIFSA, Brazil. Email: https://orcid.org/0000-0001-9913-6327 ORCID: https://orcid.org/0000-0001-9913-6327

correspondem ao estudo apresentado. O primeiro fator identifica características ligadas ao desenvolvimento pessoal dos trabalhadores, enquanto o segundo fator refere-se às questões sobre adequação e satisfação do trabalho como fatores determinantes no desenvolvimento profissional dos trabalhadores. Também foi observada a importância da satisfação como critério de melhoria profissional. Essa pesquisa também contribui para a melhor interpretação do relacionamento entre empregador e empregado, além de possibilitar diferentes perspectivas acerca da valorização de competências técnicas e interpessoais como melhoria no processo de trabalho, valorização profissional e captação de novas habilidades técnicas e emocionais para melhor desempenhar o trabalho e gerar valor através destas.

Palavras-chave: trabalhabilidade; emprego; COVID-19; análise fatorial.

Submission date: March 17, 2022.

Approval date: May 3, 2022.

Availability: 10.5965/2316419011202022046

1 INTRODUCTION

On March 11, 2020, the World Health Organization declared the outbreak of the disease caused by the new coronavirus as a pandemic. According to Werneck and Carvalho (2020), the COVID-19 pandemic, the outbreak of the new coronavirus (SARS-CoV-2), is certainly one of the biggest health challenges on a global scale. The ease of contagion of the virus intrigues scholars who are fighting the pandemic in a battle against the clock, since in just 2 months after the beginning of the pandemic there were already 2 million cases and 120 thousand deaths from the disease in the world (World Health Organization, 2020).

Because it is a virus with high ease of transmission, it is only necessary to have contact with mucous membranes, such as eyes, mouth or nose (Oliveira, Lucas & Iquiapaza, 2020), and in the midst of the absence of effective drugs to control the disease, the World Health Organization determined that in order to slow down the number of infected people in the world, a series of measures are needed to prevent the spread of the disease, as well as constant hand hygiene and social distancing, reducing or even interrupting several types of activities.

According to data from the International Labor Organization (2020), the losses in working hours in the second quarter of 2020, compared with the fourth quarter of the previous year, are 17.3% or 495 million full-time jobs, and countries with lowest incomes are the most affected, with a 23.3% reduction in hours. In this context of reduction, South America and Central America were the hardest hit in terms of lost working hours in the second quarter, at 33.5% and 35.8%, respectively, compared to North America, with 18.4% of working hours, which adds up to a total of 105 million jobs lost on the continent (International Labour Organization, 2020).

According to Costa (2020), in Brazil, the most affected sectors by the coronavirus crisis have been those operating in retail trade, accommodation services, food and manufacturing. In the first four months of 2020, around 763,000 formal jobs were closed, as a result of job reductions in March (Teixeira & Borsari, 2020). As a direct consequence of the interruption of work and the reduction of working hours, several activities were paralyzed, forcing companies to adopt new

remote working techniques, suspending non-essential productive activities, and laying off employees. However, the most affected by this interruption are informal workers, living in precarious areas, with low and irregular incomes, and without social protection associated with a formal contract, such as vacations, minimum wage, 13th salary, Guarantee Fund for length of service (FGTS), or unemployment insurance (Costa, 2020).

In addition to the economic and public health problems that countries will face, during and after the pandemic period, in a post-pandemic scenario, the reinclusion of these workers in the labor market is necessary. However, it is necessary to ensure that former employees or new entrants are able to return to activities, considering that the job market will be increasingly competitive. It is in this perspective that employability and workability are inserted. According to Maltby (2011), employability describes a person's ability to become employable, maintain a job and find a new one. In short, employability is about accessing, retaining and progressing people at work. But it is not enough just to guarantee access and maintenance of work, it is important that workers have a better management of the quality of work, bringing, then, the definition of workability. The term workability, according to Maltby (2011), considers all the factors that allow a person to perform well in a job. It aims to balance personal factors, such as physical and mental health, skills and motivation, with the work itself, how it is managed, what the work environment is like and what the role actually involves. As a complement to the concept presented, Bulhões, Vasconcelos and Leite (2015, p. 30) add that workability "involves the individual's ability to generate income, without necessarily having an employment relationship".

The focus of this research mainly relates the experiences of the respondents in their relationship with the world of work. In this sense, in the pandemic period and in the post-pandemic moment, it is essential that professionals are aware of the changes and projections that are occurring and will occur in society, so that they can meet the needs of both the worker, the employer and entrepreneur, according to Cappellari, Stefano, Raifur and Gonçalves (2016), generally these changes, in order to stay in the competitive scenario, can be attributed to the leader or the entrepreneur themselves. Therefore, this study aims to identify and analyze factors that influence human development and workers' workability according to the workers' view of their relationship to the labor market.

2 THEORETICAL REVIEW

2.1 WORKABILITY

Population aging is one of the most significant global phenomena, affecting several countries and entire populations (Sousa, Lima, Cesar & Barros, 2018). Within the professional sphere, this phenomenon has two aspects that need a deep approach, namely, the individual's health and their productivity for work. In 1980, the first workability surveys were developed, motivated by the aging of the workforce by the Finnish Institute of Occupational Health (FIOH). This study became known as the Work Ability Index. Changes in working life, globalization, digitalization and new technologies, as well as the requirements to improve quality and productivity, increase the challenges and requirements for the population, in particular, the older population (Ilmarinen, 2019).

According to Martinez, Latorre and Fischer (2016), the concept of workability was defined,

emphasizing that it is a combination of human resources in relation to the physical, mental and social demands of work, organizational culture, community and work environment. For Skovlund, Bláfoss, Sundstrup and Andersen (2020), the concept of workability is defined as it concerns the balance of demands with the employee's own ability and capability. The concept, then, is about how well a worker is, or will be, at the moment or in the near future and how capable they are to perform their activity, needing to have a balance between their mental and physical predisposition and the demands required by the activity performed (Ilmarinen, 2019). As a complement, Ramos, Gonçalves, Oliveira and Nóbrega (2021) point out that the objective of the professional in workability is to be the protagonist of their career, through the development of skills to take advantage of opportunities during their journey.

There are several determinants for workability, among them there are the determinants raised by Martinez, Latorre and Fischer (2016) that exemplify that among the conditions that can configure inadequate physical loads are: muscular work, lifting and carrying weight, sudden intense effort, repetitive movements, inadequate postures, risk of accidents, heat, cold, noise, dirt and humidity, inadequate equipment and work tools. Among the models created to explain the process of determining workability and its dimensions, there is the Work Ability House Model, explained by Maltby (2011). It is expressed in the form of a composite house with four floors and a roof set in the surrounding environment. The individual features make up the dimensions represented on the lower three floors. The first floor, which corresponds to the base, concerns health status and functional capacity, including physical, mental and social aspects.

The second floor of the house concerns professional competence (knowledge and skills, training and learning on the job) and its continuous development. The third represents the individual's internal aspects that manifest as values, attitudes and motivation. The aspects presented by the Workability House model can be affected by the external environment, that is, by the relationship between work, society and personal life. The top floor represents work-related factors, such as working conditions, demands, content, organization, community environment, management and supervision: it is the floor with the greatest weight in the building, which can affect the other dimensions, by which it is also supported. In 2010, the Workhouse model was updated.

In this update, new elements were published, such as Work Ability Plus in Austria and Work Ability 2.0 in Finland (Ilmarinen, 2019), as you can see in Figure 1 below.



Figure 1 - Workability House

According to Rashid, Heiden, Nilsson, and Kristofferzon (2021), life satisfaction is defined as satisfaction with all aspects of daily life, and workability as the worker's ability to manage their work tasks at a given time in relation to their physical and psychosocial capacity. According to Das Gecin and Esin (2021), to ensure this, behavior change programs based on models that improve the physical and spiritual capacity of employees and increase their workability and performance at work are needed. Oakman, Neupane, Proper, Kinsman and Nygârd (2018), state that changes at work are necessary to alter workability and that these changes at work take time to make an impact. According to Garthe and Hasselhorn (2021, p.12), "workability improves substantially after a voluntary change of employer". Thus, it is desirable to measure employment, workability and work limitations through inferential statistics that consider the bias in the results of trends observed in research data on the subject (Kobayashi, Kako, Kajiwara & Ogata, 2021).

According to Martinez, Latorre and Fischer (2016), with regard to Brazil, studies on workability have been carried out since the 1990s, using the Workability Index as a research instrument, but there is a lack of national studies analyzing the topic under discussion.

2.2 COVID-19 AND WORKABILITY

According to the Brazilian Institute of Geography and Statistics IBGE (2021), due to the pandemic of the new coronavirus that circulates around the world during 2020 and early 2021, which has been causing a state of alert on a global scale, with the closure of commercial establishments, promoting social distancing between people and shrinking the local economy, the Brazilian economy fell by 4.1%.

The Covid-19 pandemic has considerably changed the way people relate to one another, and is likely to have lasting consequences when it comes to workability. For example, educators at all levels needed to quickly adjust to remote education and, consequently, a new modality of

technical skills to be acquired by teachers was technological skill. Likewise, working in face-to-face activities such as customer-facing occupations cannot operate in the traditional way without everyone involved wearing a mask. These preventive measures were taken to avoid contagion, which mainly affected the way in which people work or purchase products or services (Truxillo, Cadiz & Brady, 2020).

One of the most effective measures at the moment is social distancing between people. This means that the concentration of people in the same space had to be readjusted or even stopped altogether, abruptly reducing the demand for products and services. Covid-19, in addition to being an easily transmitted disease, is also worrying because it mainly affects people with pre-existing comorbidities, such as diabetes, hypertension, or factors such as age, and most of the elderly infected by the virus did not resist the complications of the disease, as pointed out by the Pan American Health Organization (2020). From this perspective, working conditions for people become a matter of health concern and most of these individuals do not feel safe when performing their function.

According to IBGE data (2021), the unemployment rate (unemployment) from November 2020 to January 2021 reached a percentage of 14.2%, representing about 14.3 million people. This index grew by 3 percentage points compared to the same period in 2020, when the country was already in the midst of the pandemic. On the other hand, the employed population (employed) decreased by 8.6% between the quarter of November 2020 and January 2021, representing about 86 million, as shown in Table 1 below

YEAR	ELEMENTARY SCHOOL	HIGH SCHOOL	HIGHER EDUCA- TION
2014	-4.3%	3.2%	7%
2015	-8.7%	-1.2%	0.60%
2016	-8.6%	-3.1%	1.5%
2017	-5.2%	2.3%	4.1%
2018	-6.8%	1.6%	4.5%
2019	-2.1%	2.6%	0.8%
2020	-14.70%	-5.30%	-1.30%

Table 1 - Variation in Employability in Brazil

The annual study shown in Table 1 by SEMESP (2020), shows the variation in employability based on the population's level of education. Highlighting the year 2020, it could be observed that, due to the pandemic and the drop in demand from various sectors, the indices reached sudden variations, indicating a large percentage of unemployment.

Besides guaranteeing employment and keeping it, it is also important to better manage age throughout people's working lives. As Maltby (2011) points out, through better management of mental and bodily health, linking and improving work and the home environment, uniting the employee's quality of life and productivity. As a complement, Maltby points out that workability has four main dimensions: Organization and leadership at work, which encompasses the environment, community, management and leadership. The second dimension deals with the values, attitudes and motivation of employees. The third dimension is about competence, whether knowledge or skills. And the last dimension of workability concerns the mental and physical health of the individual.

With the complications of the pandemic and the discovery of new techniques for carrying Brazilian Journal of Accounting and Management – BJA&M, ISSN: 2316-4190 Vol.11, No.20, p. 047-065, June 2022.

out work, in addition to the health instability that the world is currently facing, added to the interruptions of activities that consequently generate unemployment, workability can be inserted with its most direct objective: Improve the quality of the work by encouraging better mental and bodily health. Workability can generate benefits for the economy, the company and society in general (Maltby, 2011).

It is important for any individual to be always in the process of evolution, acquiring new skills, specializing their way of doing work and managing their life as a whole. Not enough, with the advancement of technology, several manual activities were migrated to automated services, which forced the professional to specialize in equipment, at the risk of not adapting to the requirements of this new market and being excluded from the work system. Not only understanding and encouraging technical skills for work, but also ensuring a quality of life in line with work guidelines, allowing the physical and mental health of the individual as a person to be better explored in the work environment and improving the employee as a person, physically and professionally.

3 RESEARCH METHODOLOGY

The present study identifies and analyzes the factors that influence human development and the workability of workers in order to identify the relevant factors in the professional alignment and personal development of individuals.

The research used in this study has an exploratory character. According to Menezes, Duarte, Carvalho and Souza (2019), this type of research helps the researcher understand and improve knowledge about a given subject, so that, at the end of the research, for example, more studies can be developed in the area. And the research carried out is of the survey type. The Snow Ball methodological technique was also used. Thus, respondents can indicate new respondents until the saturation point or goal is reached. Therefore, it is not possible to know the rate of return of the answers (Baldin & Munhoz, 2011). The sampling that was used in the research, initially, is characterized as non-probabilistic, where the selection of elements of the sample population depends on the researcher's judgment and they choose the elements belonging to the sample. Figure 2 below shows a flowchart of the stages of the research developed.



Figure 2 - Stages of the research process

Data collection was carried out during the coronavirus pandemic, which made face-to-face collection actions impossible. Therefore, a virtual questionnaire was carried out, and they were sent through social networks (facebook, whatsapp and instagram) to the respondents through the "snow ball" technique, in which respondents can resend the questionnaire to other acquaintances and thus ensure the heterogeneity of the sample that fits the valid profile for answers (active workers), with sections containing socioeconomic questions, statements about workability and employability during the pandemic, in addition to questions divided into three sections and with answers on Likert scales from 1 to 5, where 1 represents totally agree, 2 partially agree, 3 neither agree nor disagree, 4 partially disagree and 5 totally disagree, which allow the use of data triangulation, which mitigates the weaknesses of the data obtained in a quantitative-qualitative nature. The survey reached 596 valid questionnaires. Of this number, 62% (317) are female, 36% (220) are male and 0.8% (5) preferred not to identify themselves. Regarding age, 88% of respondents indicated they were younger than 39 years old and 69% had completed higher education. 73% (433) have an income of less than R\$ 3,000.00, and 64% (385) are familiar with the use of the internet. 27% (162) look for a job only virtually, while 5% (30) prefer to go in person. Finally, 68% (404) choose the two alternatives when looking for a job. Table 2 below depicts the categories with the highest rate of respondents for better viewing.

INDICATOR	CATEGORY	QUANTITY (PERCENTAGE)
Gender	Female	317 (62 %)
Age	Less than 39 years	525 (88%)
School	Higher Education	412 (69%)
Income	Less than R\$: 3,000.00	433 (73%)
Use of the internet	Familiar with the use	385 (64%)
Job search	In person and virtually	404 (68%)

Table 2 - Socioeconomic data of respondents

As for data analysis and treatment, data processing and analysis were performed using SPSS statistical software (Statistical Package for the Social Sciences). An exploratory study of the identification of latent factors was carried out from a multivariate analysis, especially factor analysis, to identify the determining factors of human development and workability. A study of correlations and degrees of agreement between variables was also carried out through the frequency of responses

4 ANALYSIS AND DISCUSSION OF RESULTS

This section presents the analysis of the data obtained through the questionnaires sent to the sample through virtual submission with a total of 596 valid respondents. Factor analysis was used in order to identify which factors most influence workability according to the workers' point of view.

4.1 ANALYSIS OF RESULTS

The KMO test (Kaiser – Meyer – Olkin) seeks to measure how suitable is the application of the factorial analysis of the sample in relation to the database used. According to Matos and Brazilian Journal of Accounting and Management – BJA&M, ISSN: 2316-4190 Vol.11, No.20, p. 047-065, June 2022.

Rodrigues (2019), so that the data size can be accepted for analysis, a value greater than 0.5 is recommended, which is the minimum acceptable value (where, the closer to 1, the better for the analysis). The authors suggest that this number be greater than 0.7 so that the database meets the criteria of suitability for analysis. In the case studied, the value obtained in the KMO was 0.85, which is higher than the required and, therefore, meets the stipulated criterion, shown in Table 3 below:

KMO (KAISER-MEYER-OLKIN MEASURE) TEST		0.850
	Approx. Chi-Square	2166.753
Bartlett's Test	df	21
	Sig.	0.000

Table 3 – KMO and Barlett Tests

The Bartlett's Test emphasizes that the significance value indicates the accomplishment of the factor analysis (identity matrix). For this criterion to be met, the sig value is less than 0.05, the value of .000 makes it possible to carry out the factor analysis. In Table 1 below, the variables analyzed in this study will be presented. In the questionnaire used, each variable corresponds to a question directed to the respondents.

VARIA- BLES	ANALYZED VA- RIABLES	QUESTIONS	
Var 1	Knowledge	Do you know your field of work well?	
Var 4	Learning	Learning new things allows the worker to evolve personally and professionally	
Var 6	Professional Align- ment	My work is totally in line with my vocation	
Var 7	Clothing	I consider it important to take care of my appearance by wearing clothes that are appropriate for the work environment	
Var 8	Teamwork	Working as a team and interacting with people is one of my strengths	
Var 9	Job Satisfaction	I am satisfied with my current job	
Var 10	Improvement	If I had the opportunity and financial condition to go to college/higher course, I would	

Table 1 - Analyzed Variables

Based on the data collected, very satisfactory values were identified for the Factor Analysis, where Var 1 Knowledge; Var 4 Learning; Var 6 Professional Alignment; Var 7 Clothing; Var 8 Teamwork; Var 9 Job Satisfaction; Var 10 Improvement, indicated values greater than 0.7. Thus, they were considered for analysis purposes. According to Hair et al. (2009), for the continuation of the factor analysis, the variables with MSA (Measures of Sampling Adequacy) lower than 0.5 should be removed, considering them in the unacceptable domain. It was found that the variables with the highest loads were Var 10 Improvement, Var 8 Teamwork and Var 1 Knowledge, however, all the variables shown can be part of this analysis, as shown in Table 4 below:

VARIABLES	MSA
Var 1 Knowledge	.879ª
Var 4 Learning	.802ª
Var 6 Professional Alignment	.810a
Var 7 Clothing	.836a

Var 8 Teamwork	.902ª
Var 9 Job Satisfaction	.793ª
Var 10 Improvement	.925ª

Table 4 - Anti-Image Matrix

Seven variables were considered sufficient to explain the study according to Figure 3 below, and among these, as shown in the Scree-Plot graph, they were separated into 2 main factors that encompass all 7 variables analyzed. As mentioned, Figure 3 below shows the number of factors in which the variables are found after 3 iterations in SPSS, considering the number of factors that in the "Eigenvalue" axis are greater than "1".

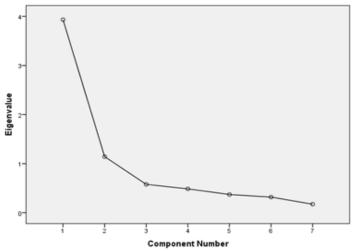


Figure 3 - Scree-Plot Chart

As seen in Figure 3, according to the Scree-Plot Graph, the 7 variables were subdivided into 2 latent factors. For analysis purposes, the "component number" values are considered as the number of Factors in the factor analysis, while the "eigenvalue" axis is the number that enables the factors. In the above case, the number of components that is above the value 1 on the "Eingevalue" axis are considered factors for analysis. Therefore, there are 2 factors above the indicated value. As mentioned, another table presented through Factor Analysis is the Rotated Component Matrix shown in Table 1. From the analysis through the SPSS platform, it is observed that the variables describe the studies in two factors, where the values found in their factorial load are suitable for their due factor as their load approaches the value 1. Thus, in Factor 1 (Personal Development) there are variables 1 (Knowledge - 0.714); 4 (Learning - 0.894); 7 (Clothing -0.873); 8 (Teamwork - 0.732) and 10 (Improvement, 0.765), while in Factor 2 (Suitability to Work), there are variables 6 (Professional Alignment - 0.847) and 9 (Job Satisfaction - 0.844). Thus, the variables of Factor 1 represent questions about personal development, while the variables belonging to Factor 2 are related to suitability for work. To find the variables belonging to each factor, their respective factorial loads are observed, and the column with the highest value among the factors is considered.

To meet the demands of an increasingly competitive job market, the individual must first acquire both technical and interpersonal skills. These requirements oblige people who wish to be included in an organization to adapt to the precepts that organizations value and define. However,

it is necessary to look beyond what the job market places as a minimum premise. It is essential that those who want to enter and remain employed try to adapt and behave as the market operates. Based on this ideology, the factor analysis presented was able to gather factors that relate to this suitability of the professional to meet market requirements, such as the correlated variables in Factor 1 (Personal Development), as seen in Table 5 below.

VARIABLES	FACTOR 1 (PERSONAL DE- VELOPMENT)	FACTOR 2 (SUITABILITY FOR WORK)
Var 1 Knowledge	.714	.404
Var 4 Learning	.894	.151
Var 6 Professional Alignment	.156	.847
Var 7 Clothing	.873	.229
Var 8 Teamwork	.732	.401
Var 9 Job Satisfaction	.176	.844
Var 10 Improvement	.765	.006

Table 5 - Rotated Component Matrix

To meet the demands of an increasingly competitive job market, the individual must first acquire both technical and interpersonal skills. These requirements oblige people who wish to be included in an organization to adapt to the precepts that organizations value and define. However, it is necessary to look beyond what the job market places as a minimum premise. It is essential that those who want to enter and remain employed try to adapt and behave as the market operates. Based on this ideology, the factor analysis presented was able to gather factors that relate to the professional's suitability to meet market requirements, as is the case of the correlated variables in Factor 1 (Personal Development).

These factors reflect determining characteristics in human development and workability in the face of the coronavirus pandemic, being of great influence on how workers view this period with a bias in the labor market. Being able to identify factors that can be verified to promote human development and how to generate value in the professional and personal scope. It can also be observed through the analysis of these factors, elements that may be useful for the realignment and replacement in the labor market of individuals affected by the coronavirus pandemic, considering what was exposed by Brito Brito, Ziviani, Oliveira and Christino (2013) that it is necessary that the professionals find solutions in moments of high complexity.

In the first factor, a direct relationship is made between the field of work and professional qualification. As observed, from the corresponding variables Var 1 Knowledge and Var 4 Learning. It was identified by the analysis that there is a direct relationship between knowledge about the field of work and the evolution of training. Therefore, having as a vision the continuous evolution of the work allows the employee to grow both personally and professionally, not limited only to the organizational level. This continuous improvement approach can be a criterion for the selection of employees, since they are willing to always seek to be ahead of their technical and interpersonal skills and the organization can benefit from these skills to obtain competitive advantage and more and more improvements in their processes, since the skills acquired become a product of the community, rather than of the individuals, and there is no transfer of these skills from one community to another, as pointed out by Gonzalez and Martins (2015). Based on this premise, the employee can better adapt to the organizational environment, since they seek to be

inserted in it, seeking to acquire skills that meet all the needs of the organization.

This analysis can also be understood from the perspective of learning, where the employee seeks to improve their skills to place themselves and/or not be surpassed in the job market. But this learning is not necessarily linked to technical skills. This can be the result of interaction with the environment in which the individual is inserted and of their relationships with other individuals in the system. Working as a team and interacting are considered strengths for the individuals who agreed with this statement since it is possible to achieve the objectives proposed by the organization in an assertive and decentralized way. Therefore, the interaction and interpersonal relationship presented in Var 8 Teamwork, inside and outside the organization is a criterion for learning and personal and professional evolution presented in Var 4 Learning, which justifies its high power of relationship. This statement is supported by the authors Belinski and Martins (2020) who claim that greater interaction between members of an organization increases the exchange of experience and cooperation between people, facilitating the creation and sharing of knowledge among employees.

Variable 10 indicated by the Factor Analysis concerns the financial condition linked to the improvement of skills. As presented in Var 10 Improvement, it appears that the search for this learning can also be limited to socioeconomic factors. It was identified that 61% of the respondents would like to take a higher course if they had the financial conditions to enter an educational institution. However, as seen in many realities, many people are instructed to, as soon as they reach the age of majority, or even before, seek to enter the job market as quickly as possible, in order to contribute to household expenses, or by abandoning the school or by the feeling of incapacity (Fritsch & Vitelli, 2016).

Thus, it is deduced that it is not only important to acquire skills for the market on a continuous basis, the market demands go beyond technical skills and relationship power between individuals, but also follow standards imposed by organizations. This is the case of Var 7 Clothing, which describes how to behave in terms of appearance in the work environment. For many, meeting clothing standards within the organizational environment is important for job maintenance, being of great importance when communicating what you want and mitigating effects that cannot be changed (Maranhão, 2018). Understanding this premise, it is considered that being well dressed and well presented can be directly linked to internal factors such as motivation and attitudes as seen in Figure 1 on workability. With regard to Factor 2 (Suitability for work), the statements were grouped into two variables. For the construction of Factor 2, the word satisfaction can be faithfully considered. In the case of these two variables, there is an agreement of almost 58% that exercising a profession aligned with their vocation is a reason for employee satisfaction, since being satisfied with the work allows the employee to perform their duties in a motivated way, managing to extract from the maximum of their capacity and helps in its maintenance, where this motivation depends solely and exclusively on the profession exercised. This satisfaction, as already reported, can generate positive or negative consequences, depending on the influences of the organizational environment and internal influences.

Being satisfied with the work can generate the ease of training the employee in order to keep them employed, since working with something they like, the individual will always seek to be in professional improvement, being more adept to possible changes in favor of their function.

4.2 DISCUSSION OF RESULTS

As seen, there are several criteria for workability, which can range from factors and professional training to factors of personal appearance through clothing that are decisive for placement or replacement in the job market. However, from the analysis of the two factors mentioned and observing the concept and objective of workability, it can be observed that it is not enough for workers to adapt to the measures imposed by organizations, they must also be engaged in adapting their work model to ensure the longevity of their employees, promoting improvements in the organization's performance and personal benefits. As Maltby (2011) points out, it is necessary to guarantee the free choice to work more and not just out of fear of poverty. Therefore, it is the function of organizations, based on internal planning, to ensure that everyone has access to work, not disregarding those who are unable to adapt to new work models, or for health reasons, for example.

The concept of workability aims to balance personal, mental, physical and work values in order to promote the improvement of the organizational environment and the individual themselves. From the Workability House model presented in Figure 1 it was possible to identify that the sample of respondents of this study is on the second floor, focusing on training and obtaining skills, if considered Factor 1 of the analysis, while in the second factor found, it is possible to perceive characteristics of the third floor, linked to motivation and attitudes (satisfaction). As also observed by the analysis of factors: training, clothing, satisfaction, appreciation and interpersonal relationships are just a few points that aggregate the organization as a whole. However, these same points must be guaranteed for all people who wish to enter the market or relocate themselves professionally. It is also very important to be attentive to the desires of employees regarding satisfaction and personal goals. The company can adapt its activity, guaranteeing an improvement for its own employee, and the employee can better perform their function, adding value to the company, and these values are also converted into benefits for the society in which this employee works, being an agent of change in their different systems.

Using the moment of the pandemic caused by the new coronavirus as a reference, organizations, which had to adopt new models of work (home office, for example), also had to dismiss their employees as a result of the crisis generated by the pandemic, as reported by the IBGE (2020), which showed that unemployment reached a percentage of 13.8% in the first quarter of 2020. As a direct consequence, the market demanded from workers: adaptation to these new models; obtaining skills that were not required before and taking into account the constant insecurity about the moment, forcing these individuals to search for new skills that are often not directly linked to their function. In this way, it becomes a challenge for those who have not been able to remain in the market, to seek training to ensure survival, and, based on the responses of the analysis carried out, most of them consider these training important in order to promote improvements in the organizational environment. But what can also be considered is that such skills can be used to generate revenue, without necessarily being formally employed.

Using these skills, which may or may not be linked to the work vocation, it is possible to generate income even without being formally employed. In a moment of instability such as the pandemic period, it is through these skills that it will be possible to guarantee survival (endeavor), and be increasingly prepared, having an easier adaptation, autonomy and the discovery of new skills and vocations. It is still possible to use these skills to generate value for the society in which one is inserted, in accordance with the concept of impact business (Santos, Souza, Silva &

Estender, 2015).

According to the factor analysis, the workability factors considered by Factors 1 and 2 were also shown, and thus it was possible to measure the degree of agreement of the variables between the respondents. In the case of Factor 1 (Personal Development), Var 4 Knowledge had a degree of agreement of 68.12%. This shows that almost 70% of respondents really know their field of work. It is an index considered satisfactory, because knowing the function in which one works and the segment in which the company is inserted is beneficial for the employee to feel that they belong and feel professionally engaged. With regard to Var 4 Learning, around 75% of respondents agreed that learning new skills allows an individual to grow both personally and professionally. In this way, it is possible to aggregate skills in different areas. As an example, an individual who works in the financial sector of an organization tends to understand better about spending control, and this skill can be transferred to the home environment, allowing the employee to also develop these skills by controlling household expenses.

Still in the first factor, it was also possible to verify through Var 7 Clothing that about 72% of the respondents stated that it is important to take care of their personal image (either for attitudes or for aesthetic and clothing issues) within the work environment. As already exposed by Maranhão (2018), it is through it that the employee can demarcate their personality and configure their credibility within the organizational scope.

It was also observed that according to Var 8 Teamwork, approximately 66% of the respondents reported that it is a strong point. Promoting interaction and working together can be beneficial for team engagement and achieving the goals imposed by the organization. It is in this line that Weber and Grisci (2010) conclude that it is in the team that there is synergy in the attitudes of the members and the shared results are greater than the individual performance of the employees. In this way, working as a team adds to the organization in a positive and continuous way.

The last variable of Factor 1 (Personal Development) is Var 10 (Improvement). In this variable, 61% of the respondents reported that if they had conditions, they would seek graduation in a higher education course. As considered by Neto and Almeida (2021), these collaborators can fit into the type of "non-traditional" students, who are often full-time workers, or perform the role of mother-father and/or are limited by financial issues. It was possible to observe that the agreement in the answers of this variable indicate a high desire of them to specialize and acquire new skills, reflecting the demand of the current competitive job market. In this factor, then, the percentages obtained showed a good degree of agreement for the workability factors. Therefore, it was possible to consider that characteristics such as seeking training and seeking to adapt to the work environment (through clothing) are factors considered by Factor 1 as relevant to personal development, as seen in table 6 below.

VARIABLE	VARIABLES 1,7, 8 AND 10	COEFFICIENTS
Van 4 I aansin a	Var 1 Knowledge	0.7
	Var 7 Clothing	0.8
Var 4 Learning	Var 8 Teamwork	0.7
	Var 10 Improvement	0.6

Table 6 - Correlations Matrix Factor 1 Var 4 Learning

5 FINAL CONSIDERATIONS

According to Ilmarinen (2009), workability is the extent to which people are able to perform their role in their respective work satisfactorily, being an important indicator of sustainable employability of workers.

At a time of economic instability, caused by the coronavirus pandemic, many workers see the market increasingly scarce and demanding, thanks to the high unemployment rates caused by the pandemic, with sudden changes and almost immediate adaptation needs. In this precept, workability is a practice to be pursued in order to guarantee not only survival in the market, but the reintegration of workers who are trying to relocate themselves in the market and generate value through the development of skills. According to IBGE data (2020), while the country was still facing the first wave of the new coronavirus, it reached a record 14.3% in August. On the other hand, with the flexibility of activities, there was an increase in people looking for a job.

In order to identify determining factors of human development and workability after the COVID-19 pandemic, this study, through factor analysis, identified two factors that presented the most relevant workability criteria for the sample obtained in relation to the labor market. In this way, after analyzing the results and discussions, it is verified that it is something relevant for the workability of the employee to be always seeking to improve their knowledge, whether in technical skills or in personal and relationship skills, this allows the worker not only to be prepared to future changes such as having knowledge and autonomy to generate value from their own abilities and, consequently, also generate value to the environment in which the individual is inserted. It was also possible to identify the importance of satisfaction as a criterion for professional improvement. An employee satisfied in performing their role may be more engaged in promoting improvements in their activity, seeking to improve their skills and, consequently, generate positive results in personal performance and in the organization itself. In this way, the employee can extract the maximum in performance and be always prepared for the demands of the market.

This research was developed from the emergence of the pandemic caused by the coronavirus crisis. Thus, the research had limitations regarding the access of respondents, being necessary to use alternative platforms to obtain the data, such as the internet and social networks such as Whatsapp, Facebook and Instagram. There was also difficulty due to the social distance imposed by health entities, access to representatives of bodies linked to employability and other data held by these bodies, making it necessary to use virtual meetings to discuss the topic.

The workability theme is of extreme importance socially. Through studies on the subject it is possible to understand the factors that lead to the development of potential individual income generation through the acquisition of specific skills. Based on this premise, new studies on workability are being developed, focusing on interviews, statistical investigations and analysis of structural equations. As a suggestion for future work, it is important to reinforce more studies on the subject, it is also interesting to identify more determining factors for relocation and professional alignment under the bias of managers, so that the data from this research can be used to support these new perspectives in order to verify the different perspectives of both the employee and employer.

REFERENCES

- Baldin, N., & Munhoz, E. M. B. (2011). SNOWBALL (BOLA DE NEVE): UMA TÉCNICA METODOLÓGICA PARA PESQUISA EM EDUCAÇÃO AMBIENTAL COMUNITÁRIA. X CONGRESSO NACIONAL DE EDUCAÇÃO EDUCERE. https://educere.bruc.com.br/CD2011/pdf/4398_2342.pdf
- Belinski, R., & Martins, J. (2020). Interface gestão do conhecimento e aprendizagem organizacional. *P2P & Inovação*. http://revista.ibict.br/p2p/article/view/5095/4590
- Brito, M. Y., Ziviani, F., Oliveira, J. L. R. d., & Christino, J. M. M. (2013). Estudo sobre a importância da Capacitação do servidor Administrativo do Hospital das Clínicas da Universidade Federal de Goiás. Revista de Administração Hospitalar e Inovação em Saúde, 10(2). https://revistas.face.ufmg.br/index.php/rahis/article/view/2084
- Bulhões, D. M., Vasconcelos, & A. B., &. L. (2016). TRABALHABILIDADE: O CAMINHO PARA O EMPREENDEDORISMO. *International Journal of Professional Business Review*, 30-39. https://dialnet.unirioja.es/descarga/articulo/6806359.pdf
- Cappellari, N., Stefano, S. R., Raifur, L., & Gonçalves, D. (2016). A LIDERANÇA E A GESTÃO ESTRATÉGICA DE PESSOAS NAS INSTITUIÇÕES FINANCEIRAS. *Revista Brasileira de Contabilidade e Gestão*, 14-27. https://www.revistas.udesc.br/index.php/reavi/article/view/2316419004062015014
- Das Gecim, G. Y., Esin, M. N. (2021). A self-management programme for work ability and quality of life in nurses aged 45 years and over: A randomized controlled trial. *International Journal of Nursing Practice*. doi:10.1111/ijn.12963
- Fritsch, R., & Vitelli, R. F. (2016). EVASÃO ESCOLAR, A ESCOLA E O MERCADO DE TRA-BALHO: O QUE DIZEM JOVENS DO ENSINO MÉDIO DE ESCOLAS PÚBLICAS. Revista Científica Regional da ANPED. http://www.anpedsul2016.ufpr.br/portal/wp-content/uplo-ads/2015/11/Eixo-2 ROSANGELA-FRITSCH-RICARDO-FERREIRA-VITELLI.pdf
- Garthe, N., Hasselhorn, H. M. (2021). The relationship between voluntary employer change and work ability among older workers: investigating the honeymoon-hangover effect. *Journal for Labour Market Research*, doi:10.1186/s12651-021-00294-0
- Gonzales, R. V. D., & Martins, M. F. (2015). Competências habilitadoras da melhoria contínua: Estudo de casos em empresas do setor automobilístico e de bens de capital. *Gest. Prod. São Carlos*, 22(4). https://www.scielo.br/j/gp/a/N87KqtkRdmjcy4zmFjQGmQS/?lang=pt
- Kobayashi, M., Kako, J., Kajiwara, K., & Ogata, A. (2021). The effects of curative-intent cancer therapy on employment, work ability, and work limitations. National Library of Medicine. https://pubmed.ncbi.nlm.nih.gov/34143435/

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R., & Tatham, R. L. (2009). *ANÁLISE MULTIVARIADA DE DADOS*. Bookman.

IBGE. (30 de mar de 2020). *Desemprego chega a 13,8% no trimestre encerrado em julho, maior taxa desde 2012*. Agência IBGE Notícias: https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/29000-desemprego-chega-a-13-8-no-trimestre-encerrado-em-julho-maior-taxa-desde-2012

IBGE. (31 de mar de 2021). *PNAD Contínua: taxa de desocupação é de 14,2% e taxa de subutilização é de 29,0% no trimestre encerrado em janeiro de 2021*. Agência IBGE Notícias: https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/30391-pnad-continua-taxa-de-desocupacao-e-de-14-2-e-taxa-de-subutilizacao-e-de-29-0-no-trimestre-encerrado-em-janeiro-de-2021

IBGE. (12 de mai de 2021). *Setor de serviços cai 4% em março e volta a ficar abaixo do patamar pré-pandemia*. Agência IBGE Notícias: https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/30716-setor-de-servicos-cai-4-em-marco-e-volta-a-ficar-abaixo-do-patamar-pre-pandemia

Ilmarinen, J. (2009). Work ability: A comprehensive concept for occupational health research and prevention. *Scandinavian Journal of Work Environment & Health*. Ilmarinen, J. (2019). From Work Ability Research to Implementation. *International Journal of Environmental Research and Public Health* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6720430/pdf/ijerph-16-02882.pdf

International Labour Organization. (2020). *ILO Monitor: COVID-19 and the world of work*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_743146.pdf

International Labour Organization. (2020). *International Labour Organization Monitor: COVID-19 and the world of work. Sixth edition.* https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_755910.pdf

Maltby, T. (2011). Extending Working Lives? Employability, Work Ability and Better Quality Working Lives. *Social Policy and Society*. http://journals.cambridge.org/abstract S1474746411000030

Maranhão, J. M. (2018). A IMPORTÂNCIA DA IMAGEM PESSOAL PARA DIFERENCIAÇÃO DO EMPREENDEDOR CRIATIVO NO MERCADO DE TRABALHO. *Rev. Belas Artes*, 2-20. https://www.belasartes.br/revistabelasartes/downloads/artigos/27/a-importancia-da-imagem-pessoal-para-diferenciacao.pdf

Martinez, M. C. (2016). Testando o Modelo da Casa da Capacidade para o Trabalho entre

profissionais do setor hospitalar. *REV BRAS EPIDEMIOL*. https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1415-790X2016000200403

Menezes, A. H., Duarte, F. R., Carvalho, L. O., & & Souza, T. E. (2019). METODOLOGIA CIENTÍFICA TEORIA E APLICAÇÃO NA EDUCAÇÃO A DISTÂNCIA. *Fundação Universidade Federal do Vale*. https://portais.univasf.edu.br/noticias/univasf-publica-livro-digital-sobre-metodologia-cientifica-voltada-para-educacao-a-distancia/livro-de-metodologia-cientifica.pdf/view

Neto, L. L. P., & Almeida, L. S. (2022). STUDANTES ADULTOS NO ENSINO SUPERIOR: STUDO NO IFAL-MACEIÓ TOMANDO AS EXPECTATIVAS E DIFICULDADES DO RE-GRESSO À VIDA ACADÊMICA. *Revista AMAzônica*, https://www.periodicos.ufam.edu.br/index.php/amazonica/article/view/8315/5927

Oakman, J., Neupane, S., Proper, K. I., Kinsman, N., & Nygârd, C. H. (2018). Workplace interventions to improve work ability: a systematic review and metaanalysis of their efectiveness. *Scand. J. Work Environ. Health*, 44(2), 134-146. https://doi.org/10.5271/sjweh.3685

Oliveira, A. C., Lucas, T. C., & Iquiapaza, R. A. (2020). O QUE A PANDEMIA DA COVID-19 TEM NOS ENSINADO SOBRE ADOÇÃO DE MEDIDAS DE PRECAUÇÃO? *Texto & Contexto Enfermagem*, 1-15. https://www.scielo.br/pdf/tce/v29/pt 1980-265X-tce-29-e20200106.pdf

Ramos, P. A., Gonçalves, H. S., Oliveira, A. B. B. d., & Nóbrega, S. G. d. S. (2021). A TRABA-LHABILIDADE EM ÉPOCA DE PANDEMIA: SEUS FATORES E AS IMPLICAÇÕES DA COVID-19 NO TRABALHO. *Revista Brasileira de Contabilidade e Gestão*, 10(16), 18-33. https://periodicos.udesc.br/index.php/reavi/article/view/19989/13279

Rashid, M., Heiden, M., Nilsson, A., & Kristofferzon, M. (2021). Do work ability and life satisfaction matter for return to work? Predictive ability of the work ability index and life satisfaction questionnaire among women with long-term musculoskeletal pain. *BMC Public Health 21*. https://doi.org/10.1186/s12889-021-10510-8

Santos, N. C. d., Souza, E. F. B. d., & Estender, J. S. d. (2022). Empreendedorismo, Responsabilidade Social e Negócios de Impacto. *XII SEGeT*. https://www.aedb.br/seget/arquivos/artigos15/27522308.pdf.

SEMESP. (2020). Empregabilidade e Ensino Superior em Tempo de Pandemia. https://www.se-mesp.org.br/wp-content/uploads/2020/04/estudo-empregabilidade-pandemia.pdf

Skovlund, S. V., Bláfoss, R., Sundstrup, E., & Andersen, L. L. (2020). ssociation between physical work demands and work ability in workers with musculoskeletal pain: cross-sectional study. Journal of Health, Population and Nutrition, 2-8. https://doi.org/0.1186/s12891-020-03191-8

Sousa, N. F. d. S., Lima, M. G., Cesar, C. L. G., & Barros, M. B. d. A. (2018). Envelhecimento ativo: prevalência e diferenças de gênero e idade em estudo de base populacional. *Cadernos de Saúde Pública*. https://www.scielo.br/j/csp/a/CgHpmyrd4pDy3yq5dMLmLbs/?format=pdf&lang=p

Teixeira, M., & Borsari, P. (2020). Mercado de trabalho no contexto da pandemia: a situação do Brasil até abril de 2020. *REMIR Trabalho*. https://www.eco.unicamp.br/remir/images/Artigos_2020/Marilane_e_Pietro_-_Mercado_de_trabalho_1o_quadrimestre_2020_vf2.pdf

Truxillo, D. M., Cadiz, D. M., & Brady, G. M. (2020). COVID-19 and its Implications for Research on Work Ability. *Work, Aging and Retirement*. doi:10.1093/workar/waaa016 Weber, L., & Grisci, C. L. (2010). Equipe, grupo ou... o quê?: possibilidades relativas ao coletivo no trabalho imateria. *Encontro da ANPAD*. http://www.anpad.org.br/admin/pdf/gpr1934.pdf

Werneck, G. L., & Carvalho, M. S. (2020). A pandemia de COVID-19 no Brasil: crônica de uma crise sanitária. *CSP - Caderno e Saúde Pública*, 1-4. https://www.scielo.br/pdf/csp/v36n5/1678-4464-csp-36-05-e00068820.pdf

WHO. (2020). WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. World Health Organization: https://www.who.int/director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020