

# LEADERSHIP AND ANXIETY ABOUT AI

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**Abstract:** *This research paper is conducted to investigate the psychological mechanisms between employees and Artificial Intelligence (AI). I analyzed the interdependence between AI anxiety, job insecurity and perceived organizational support. The main objective is to evaluate the way in which the fast evolution of technology affects the professional stability of the employees. The methodology that I used is quantitative, the data collection performed through an online questionnaire. The sample consists of 66 participants from various domains, including medicine, administration etc. Validated scales for AI anxiety, learning anxiety, quantitative and qualitative insecurity and the perceived organizational support are used to measure the answers. The data processing was performed by applying non-parametric correlation tests and Mann-Whitney U test for determination of the differences between masculine and feminine genders. It is confirmed the existence of qualitative insecurity (fear of task degradation or loss of the importation of the role) is felt more than the fear of a direct dismissal. Also, there are recorded significant differences between women and the man regarding the process of learning to use the artificial intelligence. Women are more reticent and they accept with difficulty the change, while men are open to new technologies. Finally, the perceived organizational support is generally considered a factor that lowers the development level of anxiety, but according to the analysis, it is not enough, it is necessary to apply inclusive strategies.*

**Keywords:** AI anxiety, job insecurity, perceived organizational support, leadership.

**JEL Classification:** J24, M54, O33.

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## 1. Introduction

Nowadays digital evolution is becoming increasingly pronounced and Ai integration in the organizational environment has become a reality. The progress of digitalization has got as an aim increased efficiency, but it brings a series of new challenges for the employees. In the middle of these challenges there is the AI anxiety, a phenomenon that combines the fear of the unknown with the insecurity about the future of work. The subject is important because it is surprising that the success of the new technologies' implementation does not depend on algorithms, but on the degree of acceptance among employees. The wrong perceptions bring to socio-technological blindness, stress and rigidity about learning process. This is how quantitative and qualitative insecurity appear. To have a solid assimilation of these concepts, the research begins with an analysis of specialized literature. Using it, there are highlighted theoretical fundamentals of AI anxiety, fear of losing the job, the perceived organizational support, the qualitative and quantitative components.

Through this work we analyze the way in which the employees bear up the innovation pressure. It follows the dynamic between the learning how to use artificial intelligence and the fear of job replacement. When the organization supports its employees, the Artificial Intelligence implementation is made in a harmonious way. But when the impression is created that they will become useless as soon as the new technologies are implemented, those will develop a high level of anxiety and reserve. This research has as an aim to identify the anxiety "hot spots" within the organizations. Non-parametric correlation tests and Mann-Whitney u test have been applied on a sample of 66 respondents with activities from various fields of activity. In the results section we obtained a major paradox related to the exact said use of artificial intelligence. It was demonstrated that one of the two insecurities presented (quantitative and qualitative) has a bigger impact on the employees. Also, in the results section it was inclusively analyzed the demographic component to verify if there are differences in developing the anxiety between women and men. The question we are looking for an answer is: how can we deal with the fear of replacement and how can we transform it into cooperation between men and the machine? The answer we will find out in this paper.

## 2. Psychological challenges in the digitalization era: anxiety about artificial intelligence and professional insecurity

Since the apparition of computers, it was observed an anxiety about technology. This aspect is studied and presented in specialized literature which is intended for information systems. The phenomenon was defined as a state of fear or irrational anxiety triggered by the simple thought of using technology or the interaction with the afferent devices. Although AI anxiety is a separated concept, that appeared at the same time with the technology evolution and goes beyond traditional forms manifested about technology or robots.

AI anxiety is defined as a feeling of fear or agitation which prevents those affected from using systems based on artificial intelligence. There are many forms of technophobia, but this is different because of the origin source. Often, the fear of artificial intelligence is triggered by the misperception that people have about the technological progress, the machine autonomy and a certain *blindness* about the social impact of these systems (Wang and Wang, 2022).

In the specialized literature, the phenomenon is regarded through four fundamental criteria: learning anxiety, job replacement, Ai configuration and the socio-technological blindness (Wang and Wang, 2022). **The learning anxiety** refers to the feelings of fear and anxiety of a person about the necessity of understanding the specific AI functions. This criterion is like the classic forms of anxiety that we met when the computers became increasingly efficient. **Job replacement** is determined by the theory that AI may take over some human tasks to the point in which there will be eliminated some professional roles. Over time, various professions have been forgotten or replaced together with society's development. A relevant example is the replacement of human *awakenings* with the mechanical clock. Until the first adjustable mechanical alarm clock in 1847 people who needed to wake up at a certain hour in the morning hired someone who came and knocked at their window until they wake up, and they confirmed that they woke up. So, people are afraid that history may repeat itself and as artificial intelligence fulfills more tasks without human help, factories and corporations will prefer artificial intelligence instead of employees. The reason is simple: the desire to make more money and AI does not need sleep, salary, meal break or vacation. AI configuration involves the emotional reactions which some people can have in front of technology that mimes the human behavior or aspect. It becomes intimidating and frustrating not to know if you are speaking to a human being or to a robot. These situations begin to create confusion on social media. **Socio-technological blindness** brings in discussion the worst-case scenario, often met in movies. The risk that artificial intelligence gets out of human control and provokes serious malfunctions or gets undesirable machine autonomy. The results suggest that this anxiety is not only a fear of technology, but also a crisis of professional identity. The employee is afraid that he will not know how to use an instrument, but it is more afraid that instrument will become better than himself.

### 2.1. Job insecurity

This is a very complex psychological phenomenon, being defined through the subjective anticipation of job loss (Probst et al., 2025). The state of uncertainty is amplified by the way in which each person evaluates the working environment. So there arise situations in which two employees perceive differently the same technological change. For a person the modernization of the working style may be an opportunity of efficiency increasing, while for another person may be a direct threat to his stability (Hellgren, Sverke and Isaksson, 1999). Hellgren, Sverke and Isaksson (1999) proposed a theoretical model through which the situation can be analyzed from two independent dimensions: quantitative insecurity and qualitative insecurity. **Quantitative insecurity** involves worries related to the existence of the employment contract in the future. This is the main fear of being fired, which generates enormous stress. This constant state affects both physical and mental health of the employee through the pressure of justifying his value in front of the organization. **Qualitative insecurity** represents the degradation procession of some essential aspects of work such as autonomy, task complexity, the salary level or promotion possibilities.

The inclusion of the new AI technologies highlights a strong correlation between the qualitative insecurity and the economic well-being of a person. The recent studies highlight the fact that employment must be seen from the perspective of working quality, not only for money. The working quality is one of the main pillars when speaking about life satisfaction. This implies economic security and working environment which allow utilization of competencies and professional development (Buzdugan and Hamuraru, 2025). I consider that in modern corporations, qualitative insecurity often functions as an alarm signal which foreruns the job loss. When the discontinuation of a job takes place, it is *emptied of* valuable employees by the automatization of complex tasks. This process of progressive erosion of the professional role is more harmful than direct dismissal. People feel a decrease in their importance in the organization, and a devaluation of his own experience that he gained during the time.

More than that, the loss of quality of work affects human capital and intrinsic motivation. When someone feels that he becomes a simple observer of an algorithm, he is capped, he is no longer determined to increase his performance. A break takes place in the attachment relation towards the firm, the anxiety level increases and the feeling of professional futility (Buzdugan and Hamuraru, 2025). The insecurity is not only about *having a job or not*, but also about *what my job still represents* in a period in which predominates technological efficiency and development.

## **2.2. The role of the perceived organizational support**

The main pillar for supporting the psychological balance of the employees is the Perceived Organizational Support (POS). The concept underlined by Eisenberger et al., (1986) aims to convince the employees that the organizations value their contribution and they are really interested in their well-being. The employees tend to assign to the supervisors/leaders the direct intention of corporations to support, encourage or marginalize.

According to the theory of social exchange, POS functions on the base of mutual norm. When the organizations invest in resources to support the development of the employees, those feel obliged from the moral point of view to return a favor through loyalty and implication. In the context of my research this reciprocity is essential. The employees will not perceive artificial intelligence as an enemy if the firms offer instruction and security towards it. Chirazof (2014) underlines an essential aspect, namely the relation between the perceived organizational support and the feeling of mandate at the job. The percept support reduces stress and gives the employee the feeling of competence and control over his own tasks. Chirazof (2014) too maintains that when someone feels that he has the necessary support, the negative impact of professional and security is low. In this way he is offered the chance to focus on the development of new abilities. The organizational support should be analyzed from the quality of work and economic well-being point of view. A company for which it is important to support the employees assures them a high-quality working environment where the security is both financial and emotional (Buzdugan and Hamuraru, 2025).

Based on this data, I consider that POS actions as a bridge between the pressure of innovation and the fear of inadequacy, mitigating effects. Without such support, the implementation of artificial intelligence is seen as a desire of corporations to reduce the stuff expenses. This transforms the fear of artificial intelligence into an existential threat to the employees. POS represents a set of benefits and at the same time an indicator of the human valorized capital. The employees that receive this support are inclined to adopt a behavior of active learning, reducing the social technological *blindness* (Wang and Wang, 2022). So, the quality factor of insecurity transforms into an instrument of professional development and assisted progress.

### 3. Methodology

This paper has quantitative research at the base because it was used as an instrument a structured questionnaire for collecting data. The aim of this is to analyze the connection between AI anxiety, the job insecurity and support offered by the organization, through the eyes of the employees.

#### 3.1. Research objective

The research has as a base 5 central pillars:

- Measuring the level of anxiety about artificial intelligence among a sample of employees;
- Evaluating job insecurity from the qualitative and quantitative point of view;
- Analysis of the relation between anxiety about artificial intelligence and job insecurity;
- Checking the perception difference of the anxiety level about artificial intelligence for women and men;
- Offer some organizational advice to reduce anxiety associated with the more frequent utilization of artificial intelligence at the job.

#### 3.2. Research hypotheses

To underline the strictness of the research, I established some working assumptions theoretically and clearly fundamentally. Considering the evolution of technology, the major challenge is understanding the way in which employees perceive the implementation of artificial intelligence within the firms. The anxiety triggered by artificial intelligence is not an isolated phenomenon because it appears at the crossroads between the organizational support, the level of competencies and the level of job security. To investigate these complex dynamics, I formulated five hypotheses.

**The first hypothesis (H1)** predicts the existence of a negative correlation between the perceived organizational support and AI anxiety. According to Eisenberger et al. (1986), the organizational support represents the measure through which the employees appreciate that the management values their contribution and protects their well-being. A recent study confirms the idea that the support offered by the company management softens stress, fear and the negative impact triggered by the implementation of the new technologies. (Brougham and Haar, 2024). **The second hypothesis (H2)** states that as a person feels more threatened by some factors (lack of advanced knowledge or the limited capacity of developing knowledge), there increases the possibility of developing a high level of AI anxiety. The implementation of the system which uses artificial intelligence imposes reconfiguration of professional abilities. Wang and Wang (2022) underline the fact that the AI anxiety is strongly related to the adaptability of each person. The new elements, which at first glance seem complicated, can generate a failing of maladjustment. **The third hypothesis (H3)** claims that another important factor which brings to AI anxiety is the quantitative component of job insecurity. The job insecurity has a dimensional structure and strongly affects the psychological mood of the employees, according to the study done by Hellgren, Sverke and Isaksson (1999). AI has the capacity to take some tasks which are unavoidable to some job abolition. The employees see artificial intelligence as a strong threat to financial stability and over the general quality of work. Therefore, it is amplified the reticence in using the new technologies and the anxiety level increases. **The fourth hypothesis (H4)** specifies that a relevant factor is the qualitative component of the job insecurity, which triggers AI anxiety. This happens because before a job is abolished, there are some changes by gradually reducing the importance of job. The qualitative component refers to the loss of some valorous particularities of the job, such the autonomy or the position inside the firm. **The last hypothesis (H5)** claims the fact that women are more prone to AI anxiety compared to men. There are studies which observed the fact that women perceive AI as having a high level of risk and consequently they are more reticent, while men tend to adapt to the new technologies.

### **3.3. Sample and collection procedure**

The population that participated in the research is mostly from the Southern area of Romania, but the participation of people from the entire country who are employed is not excluded. Non-working students, minors, and unemployed individuals were automatically excluded. The data was collected through a questionnaire. The collection method is a non-probabilistic one, with recruitment carried out by online distribution on Facebook groups, WhatsApp groups, to contacts, and through voluntary sharing. The sample consists of 66 respondents, all of whom held the status of employees at the time of completion. To outline as clearly as possible about the phenomenon, the sample included individuals working in various fields such as: IT, Marketing, Administration, Commerce, etc. Participants held both management positions (9 respondents) and execution positions (57 respondents), with professional experience levels ranging from under one year to over 10 years. We introduced the monitoring of AI usage (daily, rarely, or not at all) to observe how familiarity with technology modulates the emotional response.

### **3.4. Measuring instruments**

The structure of the questionnaire was composed of items taken and adapted from internationally validated scales. In this way I managed to ensure data validation. The first 8 questions were thought to define the profile of the respondents from a demographic point of view and their professional context. This section allowed me to fragment data from the following criteria: age, gender, level of education and the field activity of the respondents. The utilized items for measuring the AI anxiety have been selected from the learning anxiety subscale developed by Wang and Wang in the study from 2022. This evaluates the agreement / disagreement reaction on a scale from 1– total disagreement to 5 – total agreement with situations such as understanding the functions of AI or the fear of replacing the human factor. In this case, a high score indicates the accentuation of a psychological obstacle in front of the implementation of the new technology. For measuring job insecurity, I used the two-dimensional model proposed by Hellgren, Sverke and Isaksson (1999). By using it I measured separately the quantitative and the qualitative components. Using the quantitative component, I measured the level of fear related to the possibility of imminent job loss. On the other hand, using the qualitative component I appreciated the perceived threats to the working quality. This was vital because qualitative security affects the good condition of the employees even though their job is not directly threatened. Regarding the perceived organizational support, I used a 9-item variant adapted from Eisenberger et al., (1986) scale. Using this section, I measured on a scale from 1 – total disagreement to 7 – total agreements how the employees perceive that the organization appreciates their contribution and is concerned about individual wellbeing. To ensure the internal consistency of the measurements and the result validation I have included two reversed items (R). The items are:

- Even if I did the best job possible, the organization would fail to notice. (R)
- The organization shows very little concern for me. (R)

The other items complete the POS picture and aim to recognize the companies regarding employee progress and achievements. Also, they present the management's interest in employee opinions and the corporations' availability to support them to reach the maximum potential.

## **4. Results**

In a period in which the development of the new technologies is fast, the obtained data help us to see how the employees from Romania react to this phenomenon. The AI stress and anxiety are more often triggered by wrong perceptions. The interpretation of the results targets the identification of the weak points from the companies, where the management should intervene in order to diminish the negative effects over the employees. I have used the statistic program JASP to process the data obtained after applying the questionnaire. Before testing the hypothesis, I have evaluated the distribution of the scores. By using this stage, I have correctly established the type

of statistic tests used next. In table 1 we find the descriptive general indicators and the results of the normality test.

Table 1

The descriptive general indicators and the results of the normality test

|                         | <b>Learning Anxiety</b> | <b>Job Replacement Anxiety</b> | <b>Quantitative</b> | <b>Qualitative</b> | <b>POS</b> |
|-------------------------|-------------------------|--------------------------------|---------------------|--------------------|------------|
| Valid                   | 66                      | 66                             | 66                  | 66                 | 66         |
| Mean (arithmetic)       | 15.12                   | 15.61                          | 5.773               | 7.909              | 44.68      |
| Std. Deviation          | 7.601                   | 7.591                          | 3.037               | 3.894              | 12.38      |
| Skewness                | 0.699                   | 0.076                          | 0.709               | 0.511              | -0.130     |
| Std. Error of Skewness  | 0.295                   | 0.295                          | 0.295               | 0.295              | 0.295      |
| Kurtosis                | -0.746                  | -1.292                         | -0.691              | -1.124             | -1.264     |
| Std. Error of Kurtosis  | 0.582                   | 0.582                          | 0.582               | 0.582              | 0.582      |
| Shapiro-Wilk            | 0.851                   | 0.908                          | 0.831               | 0.862              | 0.942      |
| P-value of Shapiro-Wilk | < .001                  | < .001                         | < .001              | < .001             | .004       |
| Minimum                 | 8.000                   | 6.000                          | 3.000               | 4.000              | 20.00      |
| Maximum                 | 34.00                   | 30.00                          | 14.00               | 16.00              | 63.00      |

Source: Personal research

The main indicator is p-value of the Shapiro-Wilk test, which for all the analyzed variables is situated under the critical threshold .05. Concretely, the first four dimensions (learning anxiety, job replacement anxiety, quantitative and qualitative) have lower values than .001. And the last dimension (perceived organizational support) has a value of .004. The results obtained show a significant deviation of the scores from the normality curve. Considering the violation of the normality condition, I couldn't use standard tests, such as T test or Pearson correlation. Instead, I used nonparametric techniques (Spearman correlation coefficient and Mann-Whitney U Test) to maintain academic strictness. The general sample presents an average of job replacement anxiety (15.61) a little bit bigger than learning anxiety (15.12). Using the standard bars, it is observed quite a big dispersion of the results obtained from the 66 respondents. There is a pronounced variety of perceptions, the maximum value reaching scores of 34.00 for learning anxiety, respectively 30.00 for job replacement anxiety. The next step is to check the measuring instruments applied to the results obtained. The determination of the applied questions status is essential. These must be true and consequent. The internal consistency of the utilized scales is presented in table 2.

Table 2

The reliability analysis for the subscales used

| <b>Scala</b>                   | <b>Cronbach's <math>\alpha</math> Estimate</b> | <b>Std. Error</b> | <b>95% CI</b> |
|--------------------------------|------------------------------------------------|-------------------|---------------|
| Learning Anxiety               | 0.947                                          | 0.010             | 0.927 – 0.967 |
| Job Replacement Anxiety        | 0.949                                          | 0.011             | 0.927 – 0.971 |
| Quantitative                   | 0.893                                          | 0.025             | 0.844 – 0.943 |
| Qualitative                    | 0.892                                          | 0.025             | 0.843 – 0.941 |
| Perceived Organization Support | 0.919                                          | 0.013             | 0.895 – 0.944 |

Source: Personal research

In table 2 we can observe the fact that the scale consisting of eight items taken from the subscale learning anxiety (Wang and Wang, 2022) presents a Cronbach's  $\alpha$  coefficient of 0,947. In the specialized literature, there is not a supreme standard for measuring the Cronbach's  $\alpha$  coefficient. However, there are some thresholds that indicate if the value is acceptable, very good or exceptional, as follows: threshold over 0, 70 is acceptable, over 0,80 is considered very good, and the values over 0,90 indicate excellent internal consistency (Popa, 2011). In this case, the value is over 0.90, which confirms the fact that the eight items uniformly and precisely determine the



conceptual framework of anxiety about AI learning. The high level of reliability of the instrument allows testing the second hypothesis. So, it is certain that the answers reflect a stable personality trait, without errors caused by the item formulation.

The Job Replacement Anxiety scale (Hellgren, Sverke and Isaksson, 1999) consists of six items and has a coefficient of 0,949. The Cronbach's  $\alpha$  coefficient indicates the fact that the measuring instrument has a superior accuracy. It offers a solid base for testing hypotheses 3 and 4. It is confirmed that the perception of the job replacement is a psychological phenomenon which we can precisely measure within the sample analyzed. The quantitative job insecurity measures the fear of the employees regarding the total job replacement. It is underlined their concern related to the stability of their position in the company because of the artificial intelligence implementation. The coefficient value of 0,893 for the three items is considered a good one. This confirms the fact that the scale is useful for identifying the fear related to the job replacement considering the rapidity of digitalization. Hypothesis 3 is validated and demonstrates the fact that the employees perceived the technology as a threat to keeping the job in the company. In addition to quantitative insecurity, there is also qualitative insecurity. The last one measures the fear of the employees about the degradation level regarding the working conditions or the disappearance of some important aspects of their position. With a difference of 0,001 compared to the qualitative insecurities scale, the quantitative insecurity scale has a coefficient value of 0,892. Like in the case of the others, the internal consistency is a good one. This confirms the fact that the use of the scale in measuring the qualitative valencies of the job insecurity in the digitalization context.

The hypothesis 4 is validated because the employees perceive the quality degradation and their relevance of their daily tasks as a threat. However, the impact of the employees' concerns is not a uniform one. The way in which the management manages the implementation of the new technology reduces the employees' fear and the main pillar is the perceived organizational support (POS). This is at the same time also the last variety for which I applied the statistic procedures of checking internal consistency. This dimension measures how the companies value the contributions made by the employees. These nine items on this scale have a coefficient value of 0,919. This confirms the very good internal existence of the measuring instrument. Testing this scale is essential for supporting hypothesis 1, according to which the support offered by the company diminishes the AI anxiety of the employees. The real liability of this scale supports the fact that the investigation and staff satisfaction transforms technology from a stressing factor into an efficient instrument. I used the Spearman's rho coefficient to evaluate the relations between anxiety, the quantitative / qualitative evaluations and the perceived organizational support. The objective was to establish the intensities, direction and the statistical significance of the correlations between the studied variables. The critical value for checking the hypothesis is  $\alpha = 0,05$ .

Table 3

| Correlations between the variables                         |                       |          |
|------------------------------------------------------------|-----------------------|----------|
|                                                            | <b>Spearman's rho</b> | <b>p</b> |
| Learning Anxiety – Job Replacement Anxiety                 | 0.540***              | < .001   |
| Learning Anxiety – Quantitative                            | 0.580***              | < .001   |
| Learning Anxiety – Qualitative                             | 0.431***              | < .001   |
| Learning Anxiety – Perceived Organizational Support        | -0.272*               | .027     |
| Job Replacement Anxiety – Quantitative                     | 0.546***              | < .001   |
| Job Replacement Anxiety – Qualitative                      | 0.513***              | < .001   |
| Job Replacement Anxiety – Perceived Organizational Support | 0.035                 | .780     |
| Quantitative – Qualitative                                 | 0.783***              | < .001   |
| Quantitative – Perceived Organizational Support            | -0.304*               | .013     |
| Qualitative – Perceived Organizational Support             | -0.281*               | .022     |
| * p < .05, ** p < .01, *** p < .001                        |                       |          |

Source: Personal research

We can observe a slow negative trend which shows the fact that ASDA organizational support increases, and the AI learning decreases. Although, the values from  $p > 5$  indicate an insignificant relation for the analyzed sample. So even if an increase of organizational support is perceived, it is not guaranteed a decrease in the anxiety level about the learning process of artificial intelligence. Hypothesis 1 is validated through this table. Instead, I have identified opposite and significant correlation between learning anxiety and job replacement anxiety. Hypothesis 2 is confirmed. It clearly illustrates the perceived cognitive barriers and the fear about the assimilation process of knowledge associated with an increase of AI anxiety. The fear of total job replacement validates hypothesis 3. The quantitative insecurity is strongly and positively correlated to learning anxiety and job replacement anxiety. It is also validated hypothesis 4, by positive correlation between learning and anxiety and job replacement anxiety, but also through a strong relation between the qualitative and quantitative component. It is reflected in the truth within the organizations that before eliminating a job, the employees feel a gradual loss of task importance. The qualitative degradation functions as an anxiety trigger. For testing the last hypothesis, hypothesis 5, considering the low dimension of the sample (66 respondents), I applied for the non-parametric Mann-Whitney U test. The structure of the respondents is clearly separated into groups. The first one is represented by feminine gender (38 respondents) and the second one is represented by the masculine gender (28 respondents). In table 4 we find the descriptive results for the two groups.

Table 4

The descriptive indicators of the analyzed variables

|                                  | Group  | N  | Mean  | SD    | SE    | Coefficient of variation | Mean Rank | Sum Rank |
|----------------------------------|--------|----|-------|-------|-------|--------------------------|-----------|----------|
| Learning Anxiety                 | Female | 38 | 16.50 | 8.060 | 1.307 | 0.488                    | 37.51     | 1426     |
|                                  | Male   | 28 | 13.25 | 6.614 | 1.250 | 0.499                    | 28.05     | 785.5    |
| Job Replacement Anxiety          | Female | 38 | 16.68 | 7.279 | 1.181 | 0.436                    | 36.13     | 1373     |
|                                  | Male   | 28 | 14.14 | 7.891 | 1.491 | 0.558                    | 29.93     | 838.0    |
| Quantitative                     | Female | 38 | 6.211 | 3.386 | 0.549 | 0.545                    | 35.43     | 1347     |
|                                  | Male   | 28 | 5.179 | 2.420 | 0.457 | 0.467                    | 30.88     | 864.5    |
| Qualitative                      | Female | 38 | 7.921 | 3.928 | 0.637 | 0.496                    | 33.34     | 1267     |
|                                  | Male   | 28 | 7.893 | 3.919 | 0.741 | 0.497                    | 33.71     | 944.0    |
| Perceived Organizational Support | Female | 38 | 45.55 | 13.49 | 2.189 | 0.296                    | 35.26     | 1340     |
|                                  | Male   | 28 | 43.50 | 10.82 | 2.045 | 0.249                    | 31.11     | 871.0    |

Source: Personal research

We can observe that in the case of women, these are more prone to learning anxiety ( $M=16.50$ ) than men, who have a value of 13.25. The tendency maintains also in the case of job replacement anxiety dimension, where the women obtain a score of 16.68 compared to men who have a score of 14.14. Both the groups maintain relatively close as regards quantitative and qualitative intensity, and in the case of the perceived organizational support. To a better observation how gender differences influenced AI anxiety I analyzed the results of the test which we found in table 5.

Both genders feel fear of losing their job because of automatization. The quantitative, qualitative component and the perceived organizational support have values that do not represent significant statistic differences between the genders. It is distinguished a single relevant difference, between women and men, at the learning anxiety variable ( $U=684.5$ ,  $p=.043$ ). The obtained value for  $p$  is lower than the standard threshold of .05. The effect is a medium level one (rank-biserial correlation = 0.287). The medium rank from table 4 validates hypothesis 5. Women (mean rank=37.51) have a bigger level of AI learning anxiety learning compared to men (mean



rank=28.05). The results obtained are in concordance with other studies from specialized literature. According to a study from 2025, women are more prone, have a bigger anxiety level and they are not so open to the AI learning process compared to men (Russo et al, 2025).

Table 5

The results of the Mann-Whitney U test

|                                                                                                | U     | p    | Rank-Biserial<br>Correlation | SE Rank-<br>Biserial<br>Correlation |
|------------------------------------------------------------------------------------------------|-------|------|------------------------------|-------------------------------------|
| Learning Anxiety                                                                               | 684.5 | .043 | -0.287                       | 0.144                               |
| Job Replacement Anxiety                                                                        | 632.0 | .192 | -0.188                       | 0.144                               |
| Quantitative                                                                                   | 605.5 | .327 | -0.138                       | 0.144                               |
| Qualitative                                                                                    | 526.0 | .942 | 0.011                        | 0.144                               |
| Perceived Organizational Support                                                               | 599.0 | .388 | -0.126                       | 0.144                               |
| <i>Note.</i> For the Mann-Whitney test, effect size is given by the rank biserial correlation. |       |      |                              |                                     |
| <i>Note.</i> Mann-Whitney U test.                                                              |       |      |                              |                                     |

Source: Personal research

## 5. Discussion

Through the obtained results, the paper offers a vision over the psychological impact that the AI implementation has over the Romanian employees. The main objective was reached by validating the formulated hypotheses. I have detailed important aspects regarding the perceived organizational support and the security variables that influence AI anxiety. The validation of the first hypothesis, which predicts a negative correlation between AI anxiety and the perceived organizational support confirms the theory supported by Eisenberger et al., (1986). He claimed the fact that the level of adaptability of the employees to the implementation of the new technologies increases if the companies show concern about their well-being. It is observed that there is a concordance between the results of the paper and the recently published study of Brougham and Haar (2024), who underline the importance of the management support in diminishing the stress of the employees. The obtained results support also Chirazov's conclusions (2014) according to which, the perceived organizational support decreases the negative impact regarding the professional insecurity. It is demonstrated that in a high-quality environment should be included the emotional security according to Buzdugan and Hamuraru's analysis (2025). The hypothesis 2 is validated underlying the strong relation between the perceived limitation of learning the new necessary knowledge for utilization of artificial intelligence and anxiety appearance. The existence of the positive correlation between the two sub-scales, learning anxiety and job replacement anxiety show the fact that the reduced trust in their own abilities amplifies the fear of replacement. It is confirmed the theoretical model of Wang and Wang (2022), which claimed that AI anxiety is directly proportional to each employee's adaptability. Based on the supported model of Hellgren, Sverke and Isaksson (1999) I made a two-dimensional analysis following which I tested hypothesis 3 and hypothesis 4, obtaining relevant results. Positive correlations are observed with a strong impact between qualitative, quantitative insecurity and AI anxiety. However, we can observe an extremely important paradox for specialized literature. The qualitative variable H4 has a bigger impact over the analyzed sample and is the main factor of triggering stress, compared to the quantitative variable (H3). The degradation phenomenon of the job in the company mentioned also by Buzdugan and Hamuraru (2025) is considered by the employees more harmful, compared to the direct dismissal. This is since the employees lose their confidence also in the value that they can offer. Finally, through the non-parametric Mann-Whitney U test I tested hypothesis 5. The obtained results clearly show the fact that women have a bigger anxiety level than men when speaking about learning anxiety. According to the study made by Russo. et al., (2025) women are more reticent to learning the utilization of AI while men manifest greater openness to adapting to the new conditions offered by the implementation of the new technological systems. Through all

the data obtained following the research, it is demonstrated importance of human resources management for managing the anxiety when there are implemented technologies based on artificial intelligence.

## 6. Conclusions

The research investigates the complex evolution between learning anxiety, job replacement anxiety and the perceived organizational support among the employees. The results obtained underline the fact that the success of AI implementation and its acceptance by the employees do not depend on algorithms, but on organizational management. The main conclusion underlines a paradox. The anxiety of the employees doesn't come from the effective use of artificial intelligence, but from the way in which this concept is implemented because directly or indirectly it is transmitted to them a devaluation of the work. The study underlies the fact that qualitative insecurity is the main factor of stress. The employees feel every day how the importance of their task decreases. This fact triggers a learning reticence of the new technologies according. Therefore, the risk of losing their trust and motivation significantly increases. Perceived organizational support which can reduce the anxiety level. The results of the research showed a diminishing tendency of fears, but considering the reduced size of the sample, significant results were not obtained for this specific correlation. In the case of the sample, the organizational support is not sufficient for reducing anxiety, an important role has the inclusion strategy of the management. Organizations should understand that only by protecting the quality of work can reduce the learning reticence about artificial intelligence and they can increase openness to an efficient human-artificial intelligence collaboration.

The reduced size of the sample (66 respondents) is the main limit which hinders the generalization of the results for all the Romanian employees. Geographically speaking, most of the responses come from the south of the country, so there can be some distortion of the regional economic specific. Another limit is given by the imbalance found at the hierarchical positions of organizations. The highest proportion (57 answers) comes from the execution area employees and only 9 answers are from people from leadership sphere. This irregularity reduces the possibility of comparing the perceptions depending on the position in the company.

Although there are these limits, the obtained results create the opportunity to deepen the phenomenon, which is in a continuous expansion. For a future analysis, the sample should be significantly increased. We can obtain exceptional information through study on a balanced sample, formed by employees of different age, categories, different fields and from all the Romanian regions. So, we can observe different anxiety forms depending on the age, the activity field and the country region. Such a comprehensive study could bring to the discovery of new factors that reduce stress or, on the contrary, amplifies the AI anxiety.

## References

1. Brougham, D. & Haar, J., 2024. Smart Technology, Artificial Intelligence, Robotics, and Algorithms (STARA): Employees' perceptions of our future workplace. *Journal of Management & Organization*, 24(2), pp. 239-257. <https://doi.org/10.1017/jmo.2016.55>
2. Buzdugan, A. & Hămuraru, M., 2025. Evaluarea bunăstării economice prin prisma ocupării forței de muncă și a calității muncii. *Științe economice*, 4(79), 89-100. <https://doi.org/10.52673/18570461.25.4-79.10>
3. Chirazof, C.F., 2014. Efectul mediator al sprijinului organizațional perceput asupra relației dintre compatibilitatea percepută între persoană și organizație și sentimentul de împlinire la locul de muncă. *Psihologia Resurselor Umane*, 12(2), pp. 114–129. [online] Available at: <https://hrp-journal.com/index.php/pru/article/download/156/161> [Accessed 13 June 2026].

4. Datta, A., 2020. Knocker ups: A social history of waking up in Victorian Britain's industrial towns. *Journal of Victorian Culture*, 25(3), pp. 331–348. <https://doi.org/10.1093/jvcult/vcaa013>
5. Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D., 1986. Perceived Organizational Support. *Journal of Applied Psychology*, 71(3), pp. 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>
6. Hellgren, J., Sverke, M. & Isaksson, K., 1999. A Two-dimensional Approach to Job Insecurity: Consequences for Employee Attitudes and Well-being. *European Journal of Work and Organizational Psychology*, 8(2), pp. 179-195. <https://doi.org/10.1080/135943299398311>
7. Popa, M., 2011. „Infidelitățile“ coeficientului de fidelitate Cronbach alfa. *Psihologia resurselor umane*, 9(1), pp. 85–99. [online] Available at: <https://www.hrp-journal.com/index.php/pru/article/download/395/392> [Accessed 13 June 2026].
8. Probst, T.M., Petitta, L., Ghezzi, V. et al., 2025. Job Preservation and Strain Effects of Technology-Induced Job Insecurity on In-Role and Extra-Role Job Performance. *Journal of Business and Psychology*. <https://doi.org/10.1007/s10869-025-10062-3>
9. Russo, C., Romano, L., Iacovone, L. et al., 2025. Gender differences in artificial intelligence: the role of artificial intelligence anxiety. *Frontiers in Psychology*, 16, 1559457. <https://doi.org/10.3389/fpsyg.2025.1559457>
10. Wang, Y.Y. & Wang, Y.S., 2022. Development and validation of an artificial intelligence anxiety scale: an initial application in predicting motivated learning behavior. *Interactive Learning Environments*, 30(4), pp. 619–634. <https://doi.org/10.1080/10494820.2019.1674887>