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RELATIONSHIP BETWEEN PERCEPTION OF THE WORK ENVIRONMENT AND EMPLOYEE PERFORMANCE

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ABSTRACT

New managerial practices are increasingly concerned with working conditions and reconciling employee well-being and company performance is becoming a strategic issue for companies. All material and human elements are likely to influence the performance of workers. Thus, the question arises as to what extent the perception of the work environment can have an impact on the performance of employees?

Based on the hypothesis that the social and physical work environment has a significant impact on the individual performance of employees, this study aims to identify the factors that influence the performance of employees. The aim of this study is to determine the relationship between the work environment and individual performance by means of an opinion survey of 250 employees.

KEYWORDS: environment, perception, relationship, performance, employees.

INTRODUCTION

Work performance refers to what Volmer et al (2008) say is "what people do at work, the action itself". Rubina (2008) suggests that it is in fact the result of three causal elements: competence (the individual's knowledge and abilities), effort (the motivation to perform tasks) and the nature of the working conditions (the individual's adaptation to the conditions of the organisation). However, according to Campbell[1] (2006), Only measurable and prioritised actions are qualified as belonging to performance. Indeed, it is what the individual has been hired to do by the organisation.

Campbell (2006) defines the concept of performance as relevant goal-directed behaviours that can be measured by competence and contribution to goal achievement. In the workplace, it is common to believe that a happy and satisfied person performs better at work (Fisher, 2003). This raises the question of the extent to which the perception of the work environment can impact on employee performance.

According to Fisher (2003), the idea that a person who is happy at work performs well is widely known. Already in the 1920s and 1930s, studies were conducted in Hawthorne on the subject. They were continued by Quick (2004). Several scientific studies have proven the positive effect of this belief on individual and organisational performance (Cox & Leiter, 1992; Michie & West, 2004; Nelson & Simmons, 2003).

Staw's approach[2] (1986) in his book "Happy Productive Worker" looks at the relationship between well-being and individual performance. The scientific literature shows that well-being is often measured by means of job satisfaction.

Well-being refers to a general feeling of satisfaction and fulfilment in and through work. It cannot be separated from personal perception. Indeed, the sense of reality is relative to each individual. Moreover, its consequences are wide-ranging: physical, emotional, psychological, etc. It can be mobilised through actions such as the provision of sports facilities, massage sessions or dietary advice.

The objective of this work is to determine the relationship between the work environment of employees and their individual performance.

Organ (1997) agrees with this perspective. According to him, the perception of the environment influences behaviour. A positive perception influences good behaviour. On the other hand, a negative perception

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[1] Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. San Francisco: Jossey-Bass.

[2] Staw, B. M. (1986). Organizational psychology and the pursuit of the happy/productive worker. *California Management Review, 28* (4), pp. 40-53.

leads to counterproductive behaviour. According to a study conducted by Apkil and Mozart Consulting Group in 2014, the degradation of working conditions causes an average loss of 24% of the added value in companies due to the hidden costs of ill-being: illness, absenteeism, etc.

Based on the assumption that a social and physical working environment has a significant impact on individual and company performance. This analysis is based on the exploitation of data from an opinion survey of a sample of 250 employees[3] of large Malagasy companies. The statistical analysis of the results measuring employees' perceptions of their physical and social environment and their performance at work will be used to demonstrate the dependence between these two variables

CONCEPTUAL BASIS

According to Noë (2004), employees create their own work experiences towards their work environment through their perception which will influence their actions. A physical feature of the work environment can predict individual satisfaction and performance (Judge et al, 2001) due to its impact on attitude (Sundstorm & Sunstorm, 1986), as well as commitment (Morrow, McElroy, & Scheibe, 2012). Indeed, referring to Kristensen (2004), the physical work environment has a significant impact on emotional well-being.

Studies on satisfaction with the work environment have required an identification of the overall components to determine its meaning for the individual. Sunstorm (1984) proposes to determine the physical attributes: temperature, comfort, equipment, etc. Later, Vischer (2004) proposes to identify, in addition to the physical characteristics, the functional and human characteristics of the work environment. The scale for measuring this satisfaction describes the physical environment in terms of five factors: organisation of tasks, safety, relaxation areas, equipment and spatial layout (Carlopio, 1996). More recently, Veith et al (2007) have proposed a scale which partly takes up the items of Stokols and Scharf (1990). However, the only scale published in French is the one proposed by Fischer and Vischer (1997), which mentions the following satisfaction factors: comfort related to noise, privacy, quality of lighting, quality of air, etc.[4]…

According to the theory of self-determination, the social environment contributes to the satisfaction of psychological needs. To be clearer, the environment can be an obstacle or an asset in the motivation of employees. Laguardia and Ryan (2000) consider that the social environment is fundamental. The time a manager or colleague takes to listen to the employee's work problems has a positive impact on his or her self-determination. A work environment that treats workers as fully human beings is more productive than

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[3] Characteristics in annex (table 15)

[4] Fischer, G. N., & Vischer, J. (1997). *L'évaluation des environnements de travail*. Paris, Bruxelles: DeBoeck Université.

one that manipulates them and reduces them to objects of production[5]. Deci and Ryan (1985) argue that recognition helps the manager to create a more pleasant work environment[6].

Leather, Beale and Sullivan (2003) have demonstrated the impact of the environment on occupational stress[7]. The possibility to choose one's workspace favours the increase of the employee's autonomy and performance [8] (McCoy, 2005). A few years later, it was discovered that spatial arrangement can not only facilitate the collaboration of employees in the same department [9] (Danielson & Bodin, 2008) but also be the source of a certain perceived goodness. It should not be forgotten that collaboration is a key element in bringing about innovation [10] (DeCusatis, 2008). Barczak and al (2010) speak of a collaborative culture that encourages the team to perform better.

The concept of performance refers to: "excellence" in the literature [11]. This word comes from the old French word: "Performer" which means "To accomplish, to execute". In the 15th century, the verb "to perform" appeared with a much broader meaning. Organisational performance has been the central subject of many research investigations by famous schools of history. The classical organisational theories of Fayol, Weber and Taylor (1900-1930) explain that economic and financial objectives are at the centre of an organisation. The human relations school by Mayo, Maslow, McGregor and Likert (1920- 1970) believes that economic and financial objectives must be achieved by satisfying the needs of the staff. Von Bertalanffy's (1930-1970) systemic school of organisational thought defines the organisation in terms of its survival purpose. Performance is examined in terms of internal processes and not in terms of objectives achieved.

First, Hackman and Oldham's (1976) model adequately represents the positive influence between workplace factors and performance. This model assumes that work characteristics have an impact on psychological health, which in turn has consequences for personal and professional outcomes.

In a second step, the role theory[12] (Kahn et al, 1964) highlights factors that have a negative impact on

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[5] La Guardia, J., & Ryan, R M. (2000). Buts personnels, besoins psychologiques fondamentaux et bien-être: théorie de l'autodétermination et applications. *Revue québécoise de psychologie, 21*(2), 281-304

[6] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* New York: Plenum

[7] Leather, P., Beale, D., & Sullivan, L. (2003). Noise, psychosocial stress and their interaction in the workplace. *Journal of Environmental Psychology, 23*, 213-222.

[8] McCOY, J.M. (2005). Linking the physical work environment to creative context. *The Journal of Creative Behavior, 39(3),* 167-189.

[9] Danielson, C. B., & Bodin, L. (2008). Office type in relation to health, well-being, and job satisfaction among employees. *Environment and Behavior, 40*(5), 636-668.

[10] DeCusatis, C. (2008). Creating, growing and sustaining efficient innovation teams. *Creativity and Innovation Management,* 17(2), 155-164.

[11] Zineb Issor , LA performance en entreprise, un concept complexe aux multiples dimensions Projetics / Proyéctica / Projectique, 2017/2 N 17, p93 à 103

[12] Kahn, R. L.,Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role*

performance. Role ambiguity and role conflicts caused by lack of information, technical or other problems are stressful. Sonnentag and Frese (2005) go on to emphasise the importance of positive work characteristics in improving performance[13].

For Motowidlo (2003), job performance is defined as: "The total value expected by the organisation from the episodes of discrete behaviours that an individual performs over a given period of time. This definition leads to the understanding that performance is not a behaviour but the value expected by the organisation in the individual's performance of work. In other words, it is the behaviours that help the individual to achieve their goal.

RESULTS

The results presented will firstly concern the employees' perception of their work environment and then their level of performance at work. These analyses will then be used to verify the dependence between the two variables.

1. Social and physical environment at work

Table 1 shows the items used to assess employees' perceptions of their work environment, and from the pattern of responses, these employees more or less agree on these items.

Table 1: Trend of responses collected

VARIABLES	ITEMS	MOYENNE	ECART - TYPE
Social and physical working environment	Item 25 : Relations between colleagues	4,01	1,02
	Item 26 : Feeling of integration	4,12	1,12
	Item 27 : Solidarity between colleagues	4,03	1,05
	Item 28 : Responsibilities for development	3,97	1,35
	Item 29 : Needs and expectations	4,14	1,01
	Item 30 : Recognition at work	4	1,04
	Item 31 : Personalization of the Workspace	4,15	1,14
	Item 32 : Adapting the job to needs	4,12	1,11
	Item 33: Work Environment	4,04	1,07

Source: Authors, 2021

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conflict and ambiguity. New York:Wiley.

[13] Sonnentag, S. & Frese, M. (2005). Performance Concepts and Performance Theory. *Psychological Management of Individual Performance*, 1-25.

Indeed, the items with an average of 3 show that they tend to be neutral with respect to the statements made. (Items: 28). The items with an average of more than 3 show that these employees tend to agree with the statements proposed. (Items: 25, 26, 27, 29, 30, 31, 32, 33)

Table 2: Correlations of physical and social environment components

		ENVT_RELATIONS	ENVT_MANAGEMENT	ENVIT_PHYSIQUE
ENVT_RELATIONS	Corrélation de Pearson	1	,376**	,255**
	(bilateral)		,000	,000
	N	200	200	200
ENVT_MANAGEMENT	Corrélation de Pearson	,376**	1	,402**
	(bilateral)	,000		,000
	N	200	200	200
ENVT_PHYSO	Corrélation de Pearson	,255**	,402**	1
	(bilateral)	,000	,000	
	N	200	200	200

**. The correlation is significant at the 0.01 level (two-tailed).
Source: Authors, 2021

The Pearson correlation analysis presented in Table 2 aims to specify the existing relationships between the constituent dimensions specific to the work environment variable. It allows us to evaluate the relevance of the choice made on these dimensions to answer the research question raised by the problem.

All the dimensions of the physical and social environment are very significantly correlated at the 1% level (sig = 0.000 < 0.005). They are positively correlated with an intensity ranging from 0.255 to 0.402. The relationship with the highest intensity is between the Management dimension and the Physical Environment dimension (40.2%).

The factorial analysis by Principal Component Analysis revealed that in order to guarantee the reliability of the items of the physical and social work environment variable, only one item was removed. This item is part of the Relationship dimension. The reason for this is the low quality of representation.

Table 3: KMO Index and Barlett Test of the Physical and Social Environment

Kaiser-Meyer-Olkin index for measuring sampling quality.		,750
Bartlett Sphericity Test	Khi-deux approx.	233,820
	Ddl	28
	Signification	,000

Source: Authors, 2021

Since a Principal Component Analysis requires preconditions, it is first necessary to look at the KMO index and the Barlett Test in Table 3. The KMO index is 0.750, which is greater than 0.5. With an approximate Chi-square of 233.820 and a degree of freedom of 28, the significance of the Barlett Test: 0.000 is therefore highly significant.

Table 4: Total explained variance of the physical and social environment

Composante	Initial eigenvalues			Sums extracted from the load square			Rotational sums of the load square		
	Total	% de la variance	% cumulé	Total	% de la variance	% cumulé	Total	% de la variance	% cumulé
1	2,644	33,054	33,054	2,644	33,054	33,054	1,648	20,602	20,602
2	1,150	14,373	47,426	1,150	14,373	47,426	1,618	20,230	40,832
3	1,007	12,591	60,018	1,007	12,591	60,018	1,535	19,186	60,018

Source: Authors, 2021

From table 4 of the total variance explained, it is noted that 3 factors are retained. These 3 factors explain 60.01% of the model, i.e. a loss of information of 39.99%. The first factorial axis, which groups the items concerning Management, explains the model to the tune of 20.60%. The 2nd factorial axis, which groups the items on Relations between colleagues, explains the model to the tune of 20.23%. And the 3rd factorial axis on the Physical Environment items explains 19.18% of the model.

Table 5: Representation Quality and Environmental Component Matrix

Items	Extraction	Composante		
		1	2	3
Item 26: I feel integrated among my colleagues	,672	-,033	,818	,038
Item 27: My colleagues are supportive of me	,635	,388	,694	-,054
Item 28: I have the responsibility to evolve if I want to	,667	,809	-,108	,028
Item 29: My needs and expectations are taken into account in my work	,599	,694	,271	,210
Item 30: My boss shows me recognition for my work	,614	,565	,336	,286
Item 31: I can personalise my workspace	,614	,146	,017	,769
Item 32: My workstation is adapted to my needs	,604	,108	,033	,769
Item 33: The environment in which I work is pleasant (colours, design...)	,606	,087	,518	,469

Extraction method: Principal component analysis; Rotation method: Varimax with Kaiser normalisation. a. Convergence of the rotation in 5 iterations

Source: Authors, 2021

According to Table 5 above, the quality of representation of each variable is acceptable. The best represented variable is item 26 with an extraction value of 0.672. The least represented item is item 29 with 0.599. In general, the extraction values are all higher than 0.6.

The 1st factorial axis groups together the items relating to Management. Of the 4 items used, all were retained. The 2nd factorial axis groups the items on relationships where only 2 out of the 3 items used were retained. The third factorial axis, which groups the items on the physical work environment, contains 2 of the 3 items used.

Once the results of the factorial analysis have been obtained, the next step is to conduct a reliability analysis. Each dimension is tested with its constituent items. Cronbach's Alpha is one of the most effective ways of measuring item reliability. The closer it is to 1, the more homogeneous the set is. The more homogeneous the items, the greater the degree of consistency and the more they are oriented towards measuring a single construct.

The dimensions of the physical and social environment are: Relations between colleagues, Management of the superior and the Physical work environment.

Table 6: Summary of dimensional reliability statistics environment

Dimension of the physical and social environment	Alpha de Cronbach	Initial number of items	Number of items
Relationships between colleagues	0,733	3	2
Management	0,802	3	3
Physical and social environment	0,729	3	3

Source: Authors, 2021

The table of reliability statistics in Table 6 reveals that the two dimensions Management and Environment are reliable thanks to satisfactory Cronbach's Alpha's with 0.802 and 0.729 respectively. As for Relations between Colleagues, it was necessary to remove a doubtful item to increase the Cronbach's Alpha from 0.683 to 0.733.

2. Measurement of individual employee performance

As a reminder, the scale used ranges from 1 (Strongly Disagree) to 5 (Strongly Agree).

Items with an average of less than 3 show the employees' disagreement with the statement. Items with an average of 3 show that they tend to be neutral about the statements made. (Items: 35, 40, 42, 43, 46, 47). Items with a mean of more than 3 show a tendency to agree with the proposed statements. (Items: 34, 36, 37, 38, 39, 41, 44, 45)

Table 7: Trend of responses on individual performance

VARIABLES	ITEMS	MOYENNE	ECART - TYPE
Performance at Work	Item 34: Level of productivity	4,2	1,01
	Item 35: Achievement at Work	3,94	1,12
	Item 36: Achievement of standards	4,14	1,01
	Item 37: Achieving Excellent Results	4,23	1
	Item 38: Rigour of work	4,12	1,05
	Item 39: Investment in work	4,07	1,06
	Item 40: Perfectionism in tasks	3,79	1,07
	Item 41: Work performance	4	1,27
	Item 42: Extra effort	3,94	1,12
	Item 43: Achieving more demanding goals	3,99	1,1
	Item 44: Meeting deadlines	4,04	1,08

Item 45: Knowledge development	4,07	1,1
Item 46: Development training	3,97	1,11
Item 47: Enrichissement des compétences	3,71	1,45

Source: Authors, 2021

According to Table 8, the correlation table, in general, the significance level is 0.000< 0.005. The relationships between the dimensions are therefore significant and positive.

The strength of the relationships varies between 0.460 and 0.574. The Individual Performance variable has dimensions with 2 strong correlations among them. The first is the strong relationship between Quality and Persistence: 57.4%. The second is the relationship between Productivity and Persistence: 54.6%.

Table 8: Correlations of Individual Performance components

		PERFCE_PROD	PERFCE_QUALITE	PERFCE_PER SISTANCE	PERFCE_PRFNMT
PERFCE_PROD	Corrélation de Pearson	1	,491**	,546**	,460**
	Sig. (bilateral)		,000	,000	,000
	N	200	199	200	200
PERFCE_QUALITE	Corrélation de Pearson	,491**	1	,574**	,512**
	Sig. (bilateral)	,000		,000	,000
	N	199	199	199	199
PERFCE_PERSISTANCE	Corrélation de Pearson	,546**	,574**	1	,467**
	Sig. (bilatérale)	,000	,000		,000
	N	200	199	200	200
PERFCE_PRFCTIONMENT	Corrélation de Pearson	,460**	,512**	,467**	1
	Sig. (bilateral)	,000	,000	,000	
	N	200	199	200	200

**. La corrélation est significative au niveau 0,01 (bilatéral).
Source: Authors, 2021

The factor analysis of the Individual Performance Variable in Table 9 revealed 3 questionable items. Two of them belong to the Persistence dimension. One of them is related to the Productivity dimension. They had to be eliminated because of their low factor loadings.

Table 9: KMO Index and Barlett's Test of the Individual Performance variable

Kaiser-Meyer-Olkin index for measuring sampling quality.		,859
Bartlett Sphericity Test	Khi-deux approx.	756,477
	Ddl	55
	Signification	,000

Source: Authors, 2021

The KMO index is 0.859, which is greater than 0.5. With an approximate Chi-square of 756.477 and a degree of freedom of 55, the significance of Barlett's Test: 0.000 is therefore highly significant. The data are therefore factorable. The Factorial Analysis can be carried out.

The total variance explained in Table 10, shows that 3 factors are retained which can contain 72.65% of the total information. It can be concluded that there is a loss of information of 27.35%. The 1st factorial axis relating to quality and persistence provides 25.77% of the information, the 2nd factorial axis relating to productivity items provides 19.62% and the 3rd factorial axis relating to development items provides 17.25%.

Table 10: Total explained variance of the Individual Performance variable

Composante	Initial eigenvalues			Sums extracted from the load square			Rotational sums of the load square		
	Total	% de la variance	% cumulé	Total	% de la variance	% cumulé	Total	% de la variance	% cumulé
1	4,632	42,112	52,112	4,632	42,112	52,112	2,835	25,772	35,772
2	1,193	10,843	62,955	1,193	10,843	62,955	2,159	19,624	55,397
3	1,067	9,696	72,652	1,067	9,696	72,652	1,898	17,255	72,652

Méthode d'extraction : Analyse en composantes principales.

Source: Authors, 2021

The extraction values in Table 11 show that the quality of representation of the variables is acceptable, with values above 0.5. The best represented item is item 40 for 0.750. The least represented item is item 37 for 0.598.

Table 11: Representation quality and component matrix of Individual Performance

Items	Extraction	Composante		
		1	2	3
Item 34: I achieve a high level of productivity at work	,725	,203	,815	,139
Item 35: I do as much or more work than expected	,633	,163	,774	,081
Item 37: I get excellent results in my work	,598	,181	,698	,219
Item 38: I am rigorous in my work	,577	,729	,154	,146
Item 39: I do the best I can and I am not satisfied with a passable work	,659	,762	,246	,134
Item 40: I take care of the smallest detail of the task to be done, to make sure that everything is done correctly	,750	,830	,063	,238
Item 41: I do an excellent job in order to determine what could favour a good performance in the future	,599	,684	,213	,179
Item 42: I make an extra effort to complete a task successfully, despite difficulties and setbacks	,593	,540	,431	,231
Item 45: I develop my knowledge by taking external courses	,601	,128	,159	,747
Item 46: I take advantage of training or development opportunities offered by the organization	,636	,354	,230	,677
Item 47: I try to enrich my skills by taking advantage of opportunities in the work environment	,667	,179	,094	,791

Méthode d'extraction : Analyse en composantes principales ; Méthode de rotation : Varimax avec normalisation Kaiser. a. Convergence de la rotation dans 4 itérations.

Source: Authors, 2021

The component matrix after rotation reveals that the Quality items are correlated to the 1st factorial axis. All the 4 mobilised items are retained. The productivity items are positively correlated with the 2nd factorial axis. Out of the 4 items mobilised, only 3 items are acceptable. And the items concerning Persistence are correlated to the 3rd factorial axis. Out of the 4 items mobilised, only 2 of them are retained.

The last variable of the study is Individual Performance with the following dimensions: Productivity, Quality, Persistence and Environment.

Table 12: Summary of dimensional reliability statistics for Individual Performance

Individual Performance Dimension	Cronbach's Alpha	Initial number of items	Number of items selected
Productivity	0,761	4	2
Quality	0,811	4	4
Persistence	0,507	3	1
Development	0,869	3	3

Source: Authors, 2021

According to Table 12, the table of reliability statistics, the Quality dimension (0.811) is convincing with a reliability index exceeding 0.7. The same is true for the Development dimension with 0.869. For Productivity, Cronbach's Alpha increased from 0.653 to 0.761 after the removal of two deficient items. For Persistence, the removal of the defective items increased the Cronbach's alpha from 0.472 to 0.507, but it remains insufficient.

DISCUSSION

The hypothesis suggests a positive impact of the physical and social environment of the workplace on the work performed by the employee.

The correlation between Relationships and persistence is 29.1% (Table 13). However, this relationship is strongly emphasised by research conducted by Oplatka (2006); Somech & Ron (2007). The support of other colleagues, which indirectly implies a good relationship with them, would be one of the most contributing factors to performance. In the case of team projects, this theory has some validity because the contribution of each team member determines the final result. Furthermore, Organ (1998) emphasises the importance of selfless behaviour such as mutual aid, team spirit and civic virtues in improving efficiency.

Table 13: Correlations Physical and Social Environment with Performance

		PERFCE_ PRODUCTIVITE	PERFCE_ QUALITE	PERFCE_ PERSISTANCE	PERFCE_ PERFECTIONNEMENT
ENVT_RELATIONS	Corrélation de Pearson	,339**	,366**	,291**	,304**
	Sig. (bilateral)	,000	,000	,000	,000
	N	200	200	200	200
ENVT_MANAGEMENT	Corrélation de Pearson	,484**	,485**	,421**	,412**
	Sig. (bilateral)	,000	,000	,000	,000
	N	200	200	200	200
ENVT_PHYSO	Corrélation de Pearson	,426**	,320**	,409**	,305**
	Sig. (bilateral)	,000	,000	,000	,000
	N	200	200	200	200

**. The correlation is significant at the 0.01 level (bilateral).
 Source: Authors, 2021

Table 13 above also shows that there is a correlation between all dimensions of the physical and social environment and all dimensions of the Performance variable. The significance level values are all equal to 0.000 < 0.005. The strength of the relationships ranges from 0.291 to 0.485. It is found that the strongest relationship is 49.1% between quality of work and Management. The weakest relationship is between relationships and job development.

The validation of the hypothesis continues in Table 14 by examining the Coefficients Ratio (CR) which was found to be greater than 1.96. The null hypothesis (H0) assumes that there is no relationship between the 2 variables at the 5% significance level (P). As a reminder, the hypothesis assumes that a social and physical work environment has a significant impact on individual performance.

Table 14: Summary of hypothesis testing statistics

Liens	Estimate	S.E	C.R	P
PERFORMANCE <--- ENVIRONNEMENT	1,072	0,321	3,343	***

Source: Authors, 2021

It is noticed a Coefficient Ratio of 3.343 ≥1.96 and a Probability of 0.000 ≥0.05. As a result, the hypothesis is affirmed by showing a positive effect between physical and social environment and employee performance. Thus, the hypothesis is verified.

CONCLUSION

With the aim of analysing the relationship between employees' work environment and their individual performance, this research is based on the analysis of survey results from a sample of 250 employees. These analyses confirmed that the social and physical work environment has a significant impact on individual and company performance.

BIBLIOGRAPHY

[1]. **B. Charles-Pauvers, N. Commeiras, D. Peyrat-Guillard, P. Roussel** (2006), «*Les déterminants psychologiques de la performance au travail: un bilan des connaissances et proposition de voies de recherche* », Toulouse. LIRHE

[2]. **Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager,** (1993), "*A theory of performance* ». San Francisco: Jossey-Bass.

[3]. **Carlopio, J. R.** (1996), "*Construct validity of a physical work environment satisfaction questionnaire*". Journal of Occupational Health Psychology.

[4]. **Danielson, C. B., & Bodin, L.** (2008), "*Office type in relation to health, well-being, and job satisfaction among employees*". Environment and Behavior.

[5]. **Deci, E. L., & Ryan, R. M.** (1985), "*Intrinsic motivation and self-determination in human behavior",* New York: Plenum.

[6]. **DeCusatis, C.** (2008), "*Creating, growing and sustaining efficient innovation teams. Creativity and Innovation Management ».*

[7]. **Fischer, G. N., & Vischer, J.** (2003), "*L'évaluation des environnements de travail »*, Paris, Bruxelles: DeBoeck Université.

[8]. **Kahn, R. L.,Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A.** (1964), "*Organizational stress: Studies in role conflict and ambiguity",* New York:Wiley.

[9]. **La Guardia, J., & Ryan, R M.** (2000), « *Buts personnels, besoins psychologiques fondamentaux et bien-être: théorie de l'autodétermination et applications* », Revue québécoise de psychologie.

[10]. **Leather, P., Beale, D., & Sullivan, L.** (2003), « *Noise, psychosocial stress and their interaction in the workplace*", Journal of Environmental Psychology.

[11]. **McCOY, J.M.** (2005), "*Linking the physical work environment to creative context*". The Journal of Creative Behavior.

[12]. **Motowidlo, S.J.** (2003), « *Job performance* », dans Handbook of Psychology, Industrial and Organizational Psychology,

[13]. **Sonnentag, S. & Frese, M**. (2005), "Performance Concepts and Performance Theory".

[14]. **Staw, B. M.** (1986), "*Organizational psychology and the pursuit of the happy/productive worker*". California Management Review.

[15]. **Stéphane Jacquet**. (2011), « *Management de la performance: des concepts aux outils* ».

[16]. **Stokols, D., & Scharf, F.** (1990), "*Developing standardised tools for assessing employee's ratings of facilities performance*". In G. Davis & F. T. Ventre (Eds.), Performance of buildings and serviceability of facilities. Philadelphia, PA: American Society for Testing and Materials

[17]. **Vischer, J.C.** (2008), "Towards a user-centred theory of the built environment", Building Research & Jr information.

[18]. **Zineb Issor.** (2017), « *La performance en entreprise, un concept complexe aux multiples dimensions* », Projetics / Proyéctica / Projectique, 2017/2 N 17.

APPENDIX

Table 15: Socio-demographic characteristics of the sample

Variables	Modalités	Effectif	Fréquence
Genre	Male	94	47
	Female	106	53
Age	18 to 24 years old	26	12,6
	26 to 35 years old	55	26,6
	36 to 45 years old	64	30,9
	46 to 55 years old	49	23,7
	Over 55 years old	9	2,9
Level of education completed	Ph.D.	28	13,5
	Master	89	43
	License	83	40,1
Marital status	Single	75	36,2
	Married	94	45,4
	Widowed	20	9,7
	Divorced	11	5,3
Direction	Financial Department	23	11,1
	Human Resources Department	27	13
	Customer Relations Department	20	9,7
	Marketing Department	33	15,9
	Sales and Distribution Department	37	17,9
	Technical and IT Department	20	9,7
	Sponsorship and Solidarity Department	19	9,2
	Digital Strategy and Development Department	21	10,1

Source: Authors, 2021