

Re-engineering human resources and its role in achieving job satisfaction for professors of the Faculty of Economic, Commercial, and Management Sciences at the University of M'sila

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Abstract:

This paper aims to illustrate the importance of human resource reengineering in achieving professors satisfaction at the University of M'sila's Faculty of Economics, Commerce, and Management Sciences, to clarify the relationship, we distributed questionnaires to all 130 college professors, retrieved 110 at a rate of 84,62%, and excluded 16 invalid ones, leaving us with 94 valid forms for analysis at a rate of 85,45%, and after data collection and analysis using SPSS statistical software 19, we concluded that both HRR and job satisfaction are achieved at medium levels at the university, in addition to the presence of a statistically significant impact of the level of HRR on job satisfaction at the university, the study recommends that the university should strengthen the levels of re-engineering of human resources in all its dimensions, to ensure effective job satisfaction for its human resources.

Keywords: Human Resources Re-engineering; Job Satisfaction; Professors; University of M'sila.

JEL Classification: J28 ; J31; J33; J81; M12.

Introduction

In light of the major changes associated with globalization and rapid technological development, organizations in the industrial, commercial, and even service fields have made aim of reviewing their administrative methods and adopting new measures adapted to modern developments in various forms, this is why the emergence of new terms such as” **re-engineering**”, which has become one of the basic requirements of each organization to ensure survival and continuity, and the importance of the major **human resource** in the organization, as it represents its **intellectual capital**, which is manifested in creativity and talent that gives it a competitive advantage(Bosh, 2020, p. 04), it must redesign the modern tools related to it (selection, training, career path...) to ensure its profitability and reduce costs by the good investment of its available resources, and trying to change its **functional structure** to keep abreast of contemporary **technological developments**.

On the other hand, most organizations strive to fulfill the requirements of their workers and **satisfy** them by meeting their aspirations, improving work conditions, and obtaining promotions and rewards..., because they are the reason for her survival and increase in productivity depending on their **satisfaction**, and this is what made us study the relationship between **re-engineering human resources** and **job satisfaction**, through a field study of professors of the Faculty of Economic, Business and Management Sciences at the University of **M'sila**.

Research objectives: The study aims to fulfill the following goals:

- 1-** Rooting the concepts related to the **re-engineering of human resources** in its various dimensions, as well as **job satisfaction**, to build a valid **model** for measuring them in the institution under study;
- 2-** Test the correlation to **re-engineer human resources** on **job satisfaction** in the institution under study;
- 3-** Coming out with a set of conclusions that reflect the research variables, and presenting a set of recommendations and proposals to enhance the level of knowledge of the surveyed sample regarding research variables.

Previous studies: through our study, we have examined some previous studies related to the two variables (**re-engineering human resources**) and (**job satisfaction**), and we will mention the most important of them as follows:

- 1- (Kalinina, Davydyuk, & Horudzy, 2020)**, This study aimed to identify human resources re-engineering tools to assist in combating institutional crises, and this process requires consideration of factors related to business,

budget, organizational structure, the research concluded by the importance of **HRR** in developing institutional structures to face crises.

2- (Okoli & Azih, 2015), The study aimed to enhance the role of human resources by re-engineering education programs in universities in **Nigeria**, the study recommended the use of e-learning to improve learning outcomes and to provide all supplies and equipment necessary for proper teaching in secondary schools as well as universities.

3- (Olofinkua, 2020), This study dealt with all aspects of job satisfaction for the various answers of the faculty in **Catholic universities** in **Nigeria**, and it studied the interaction between gender and religion with job satisfaction and motivation, the questionnaire tool was applied to **247** members of **3** Catholic universities, and it found that there are statistically significant differences in **job satisfaction** and its absence in the field of **motivation**.

4- (Hellman, 2019), the study aimed to find the degree of the relationship between personality and **job satisfaction** for post-secondary teachers, and it was applied to **75 teachers** from the **United States** and concluded that there is a relationship between **satisfaction**, conscience, and extraversion, it recommended that universities rely on these results to employ their employees and enhance their **satisfaction**.

Based on, the current research is considered an evolution of previous studies that dealt separately with **job satisfaction** and **HR re-engineering** in the business setting, and perhaps what sets it apart is that, to our knowledge, it is one of the first studies to attempt to incorporate **HR re-engineering** (independent variable) and **job satisfaction** (dependent variable).

1- Literature Review

1-1- Human Resource Re-engineering (HRRE)

Hammar (1990) is the first to introduce **BPR** and is considered the father of it (Boufas & Boukhadra, 2020, p. 04), it was used as a term and popularized through **Hammar and Champy (1993)**, it's defined **re-engineering** as" it is a redesign of business processes to provide improvements in quality, cost, service, and speed of delivery"(Hammer & Champy, 1993, p. 32), **re-engineering** means starting again and reviewing the basic work systems and procedures and re-correcting them in a new and different way (Coombs, 2014), also it is a radical change that leads to new solutions (Park, 1995).

1-1-1- Human Resource Re-engineering definition

We gave many definitions that researchers have covered to define **human resource re-engineering**, this is due to the importance of the human resource at work, **the human resource re-engineering** is a redesign of the foundations, principals, and processes on which the system is managed in the organization as a whole (Mason, 2018), it has also been defined as an opportunity for individuals to automate routine and boring work procedures that have a lower value and then to focus attention on what is important to the customer and decisions related to his service style (Gipin & Murphy, 2018), **Shahmandy & Others** defined it as “a process aimed to transform the skills, capabilities and knowledge of **human resources** into intellectual capital, and employing it in achieving the general objectives of the organization” (Shahmandy, Silong, & Abu Samah, 2012, p. 219), **HR re-engineering** is represented in all services provided immediately, on the place and upon request, using advanced technological systems with competent people, to provide quality and productive results (Francis & Kabir, 2008, p. 04).

We have adopted this definition in the current study, as it includes all aspects that make the integration between **re-engineering** and **human resources**. It also focused on the target group of **employees** in the organization to create added value for both **employees** and **management**.

1-1-2- Human resource re-engineering dimensions: we will deal with the dimensions of **human resources re-engineering** as follows:

1-1-2-1- Human resource: the experience and knowledge of the employees determine the performance and value of the company, and they represent its intellectual capital of strategic importance in the long term (Milan et al., 2014, p. 04).

1-1-2-2- Information technology: re-engineering :is transforming paperwork and improving human resource services using computers (SPENCER & Jr, 1995, p. 15), The enterprise's adoption of **the technology** enables it to save time and cost (Naz, Azhar, Nawaz, & Gul, 2013, p. 04).

1-1-2-3- Organizational Structure: Minterzberg (1972) said: **organizational structure** is everything related to functions, systems and operational procedures, with the help of employees to achieve goals, **Hold & Antony (1991)** defined: **organizational structure** is the processes of organization and distribution of powers, methods of communication and sound decision-making associated with environmental changes, and solve problems and disagreements (Ahmady, Mehrpour, & Nikooravesh, 2016, p. 02).

Using **information technology** with competent **employees** simplifies operational procedures and reduces problems to achieve the desired goals.

1-1-3- The success of the re-engineering of HR processes:

The success of **re-engineering human resources** depends on the degree to which employees accept it, as they are the most important resource in the organization, therefore, various obstacles should be avoided: by forming a highly experienced **re-engineering** team, training good employees, and introducing **technology** into all areas and functions of the organization. (Milan et al., 2014, pp. 217-218).

1-2- Job satisfaction (JS)

The topic of **job satisfaction** has been addressed by many researchers and philosophers across different time periods, and we will try to present some of them.

1-2-1- Job satisfaction definition:

Oxford dictionary defines **job satisfaction** as a: "the good feeling that you get when you have a job that you enjoy", and **satisfaction** is said to be the pleasure that you feel when you do something or get something that you wanted or needed to do or get, it is a function of the relationship between what a person seeks in job and what the person experiences from the job (Donley, 2019, p. 31), There is another definition of **Job satisfaction** is the level of employee satisfaction with their jobs, with the availability of resources, team work and a good supervision of supervisors (Anderson, 2019, p. 23), it's also defined as a: "It is the individual's feeling of his job direction, and it is related to work conditions, wages, and relationships with co-workers of different positions they occupy" (MIKHAEL, 2020, p. 23), There are many researchers who dealt with job satisfaction in seven types, namely: supervision, employment, wages, politics, colleagues at work, progress and promotions (Alam & Asim, 2019, p. 03).

We can say **job satisfaction** is "the individual's feeling of **satisfaction** with his **job** through promotions, increase in wages, holding positions and participating in decision-making, all interest of the organization".

1-2-2- Job Satisfaction factors: we will touch on the most important dimensions related to job satisfaction as follows:

1-2-2-1- Working Condition and the nature of work: working conditions are composed of the culture of an organization and the relationship between worker's with the organization (Budiharso & Tarman, 2020, p. 04), **working conditions** are the basis of labor relations, and it

deals with various topics of working time, salaries and all the requirements of the workplace (Yan, 2019, p. 05), **the nature of work** is the work that employees do, and the more fun it is, the more motivation and the performance improvement (Sukriket, 2018). When the **conditions** and **nature of work** are acceptable and appropriate, workers' performance improves.

1-2-2-2- Promotion: career progression, just as it is financially necessary, also raises the psychological side of the individual, making him offer good results. **Promotion** is a critical part of workplace satisfaction and has a significant effect on it (Bhardwaj, Mishra, & Kumar Jain, 2021, p. 04).

1-2-2-3- Co-workers: A **co-worker** is an individual with whom the employee works, as they exchange knowledge and experiences, and positive relationships among colleagues reduce work pressures (Deery, Iverson, & Walsh, 2010).

1-2-2-4-Wages: it is every wage paid for effort, plus all profits (Tamašauskienė, Šileika, & Mačiulytė, 2008, p. 166).

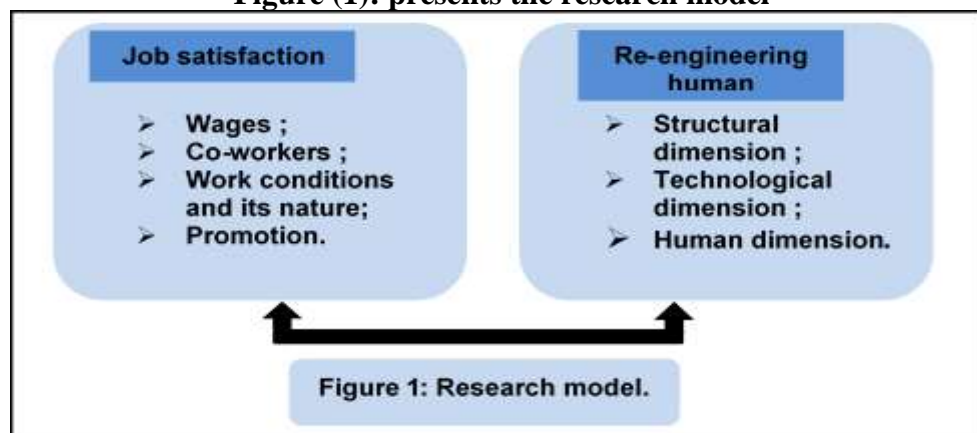
The more these factors are available, the greater the **job satisfaction**, and thus improving performance and increasing productivity.

2- Methodological framework for the field study

2-1- Research model and hypothesis study:

Based on the theoretical part and analysis of previous studies, the model was formed from two variables, the first: **re-engineering human resources** (the independent variable) with its dimensions (human, technological and organizational), as for **job satisfaction** (the dependent variable) with its dimensions (wages, co-workers, work conditions and its nature, promotion).

Figure (1): presents the research model



Source: prepared by researchers

A preliminary draft of **the questionnaire** was developed based on previous studies and literature review, and to test its apparent validity, it was presented to a group of **specialized arbitrators**, it came from personal and functional questions, **in addition to 30 paragraphs, 14 paragraphs of which are first for re-engineering Human Resources, and the last 16 paragraphs for job satisfaction.**

Study hypotheses: Based on the study model, we have adopted the following hypotheses:

- 1- "There is no statistically significant impact at the level of significance ($\alpha \leq 0,05$) of **the human dimension on job satisfaction.**"
- 2- "There is no statistically significant impact at the level of significance ($\alpha \leq 0,05$) of **the technological dimension on job satisfaction.**"
- 3- "There is no statistically significant impact at the level of significance ($\alpha \leq 0,05$) of **the organizational dimension on job satisfaction.**"

2-2- Sample study:

As for our study, this research community consists of all the professors of the Faculty of Economic and Business Sciences and Management Sciences at the University of M'sila, who number **(130)** professors, accordingly, we distributed **(130)** questionnaires and retrieved **(110)**, with a return rate of **(84,62%)**, and we excluded 16 forms that are not valid for analysis, and we still have **(94)** valid forms for emptying and analyzing with **(85,45%)** ratio, which is a significant percentage that shows the extent of the professors' interaction with the study tool.

2-3- Normal distribution test: We used the Kolmogorov-Smirnov test to ensure that the data had a normal distribution, and we obtained the following results:

Table (1): the normal distribution test for the fields of study

Domains	The probability value(sig)	Z
The human dimension	0,091	1,244
The technological dimension	0,033	1,432
The organizational dimension	0,075	1,283
The field of human resources re-engineering	0,263	1,006
The domain of job satisfaction	0,842	0,616

Source: prepared by researchers with the help of the results of the spss program

The results show that the probability value for all fields of study is greater than the level of significance ($\alpha = 0,05$), therefore, we can say that the

study data are subject to a normal distribution, allowing us to conduct different parameters tests to answer questions and hypotheses.

2-4- Constructive validity of the study tool: it illustrates the extent to which each field of study is related to the total degree of the questionnaire, and the following table shows the correlation coefficients.

Table (2): correlation coefficients between the fields of the questionnaire and its total score

Domains	Pearson Correlation Coefficient	The probability value(sig)
The human dimension	0,803	0,00
The technological dimension	0,791	0,00
The organizational dimension	0,825	0,00
job satisfaction	0,935	0,00

Correlation is statistically significant at the level of significance ($\alpha \leq 0,01$)

Source: prepared by researchers with the help of the results of the spss program.

The result shows that all correlation coefficients are positive and statistically meaningful at ($\alpha=0,01$), based on these results, we infer that the tool has high credibility and validity for use in this study.

2-5- Test the reliability and validity of the study tool

We will measure the validity and reliability of the study instrument through (**Cronbach Alpha**) as well as **the validity coefficient**, according to the following table:

Table (3): the reliability coefficient and validity of the study axes

Domains	Number of paragraphs	reliability coefficient	validity coefficient
The human dimension	4	0,708	0,841
The technological dimension	5	0,747	0,864
The organizational dimension	5	0,799	0,894
The field of human resources re-engineering	14	0,892	0,945
Domain of job satisfaction	16	0,909	0,953
All study	30	0,938	0,969

Source: prepared by researchers with the help of the results of the spss program

Through table (3): it is evident that the (**Cronbach's Alpha**) coefficient reached a value of (**0,938**), which is an excellent ratio, all the stability coefficients for the search axes and their dimensions are high and suitable for research purposes, these, we made sure of the reliability and validity of the tool for analyzing the results.

These findings were validated by estimating the validity coefficient by measuring the root of the reliability coefficient (**Cronbach's alpha**), which came out to **(0,969)**, which is an excellent ratio, also, all the coefficients of the study axes have very good grades, this confirms once again that the tool is suitable for research purposes.

3- Presentation and discussion of the results of the study:

3-1- The personal and functional characteristics of the study sample:

These characteristics (gender, age, degree, experience) will be examined through the following table:

Table (4): Personal and functional characteristics of the study sample

Description	Type	Result	Percentage
Gender	Male	66	70,2%
	Female	28	29,8%
Age	Less than 30	12	12,8%
	(30 and 40 years old)	49	52,1%
	(41 and 50 years old)	29	30,9%
	More than 50 years old	4	4,3%
Academic degree	Professor	5	5,3%
	Lecturer professor A	45	47,9%
	Lecturer professor B	16	17%
	Assistant professor A	7	7,4%
	Assistant professor B	21	22,3%
Experience	Less than 5 years old	13	13,8%
	Between (5and10years old)	36	38,3%
	Between (11and15 years old)	34	36,2%
	More than 15 years old	11	11,7%

Source: prepared by researchers with the help of the results of the spss program.

We note that the largest proportion of **males (70,2%)**, while **females** represent **(29,8%)**, due to the responsibilities incumbent on women, in addition to her presence in a conservative environment that does not allow her to complete higher studies due to customs, traditions and early marriage, unlike males, as for the predominant age group, it is the category **(30 and 40 years)** at a rate of **(52,1%)**, which is a strong youth population, followed by the group **(41 and 50 years)** at a rate of **(30,9%)**, and this is among the reasons for the success of the university, It also appears that the largest percentage of the respondents is **(47,9%) (for a lecturer A)**, and this is normal and refers to the nature of the youth sample and the spirit of competition towards science and higher ranks, According to years of experience, the largest percentage of individuals **(between 5 and 10 years)**

was found at **(38,3%)** and **(between 11 and 15 years)** by **(36,2%)**, which was a close proportion and this is due to the employment policy at the time, we notice its decline among individuals with less than **(5 years)** experience due to the austerity policy pursued by the Algerian state.

3-2- Measuring the level of awareness of the dimensions of the variables:

We will calculate the medians and standard deviations of the study axes represented in the human dimension, the technological dimension, the organizational dimension, and the **job satisfaction** to give a general perception about them for analysis and interpretation, according to the following table:

Table (5): medians and standard deviations of the study sample answers

Dimensions	Medians	standard deviation	Arrangement	General level
Human dimension	3,4574	0,77567	2	Medium
Technological dimension	3,5447	0,71806	1	Medium
Organizational dimension	3,3085	0,77191	3	Medium
HRR	3,4354	0,66966	//	Medium
Job satisfaction	3,4688	0,68916	//	Medium

Source: prepared by researchers with the help of the results of the spss program.

We discovered that the level of human resources re-engineering was medium, as evidenced by the weighted median **(3,435)** and a standard deviation of **(0,669)**, indicating that there is no substantial variation in the answers of the research group, it is clear to us through **table (5)** that the level of job satisfaction within the studied institution was **medium**, that is, with a moderate degree of approval for the study sample, with a median **(3,468)** and a standard deviation **(0,689)**.

For more details, we will try to analyze the level of all dimensions of **re-engineering human resources**, as well as **job satisfaction**, to find out the organizational problems that made the levels of achieving the variables not achieving the required, according to the following table:

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Table (6): shows the medians and standard deviations for the human resources engineering dimensions' paragraphs

Number	Paragraphs	Medians	Standard deviation	arrangement	General level
Human dimension					
1	The university administration seeks to rethink the basics of work to move away from routine.	3,5	1,114	2	Agree
2	The professors are convinced of the importance of implementing the university's career path management programs.	3,627	0,915	1	Agree
3	Professors are proficient in dealing with various software and systems used in human resource management (Moodle and Progress).	3,308	1,037	4	neutral
4	The university administration seeks to attract professors with high knowledge capabilities.	3,393	1,165	3	neutral
Human dimension		3,457	0,776	//	medium
Technological dimension					
5	The university's technological capabilities contribute to supporting the jobs it exercises.	3,681	0,929	3	Agree
6	Available technology improves performance.	3,925	0,918	2	Agree
7	E-business methods are used to reduce costs.	3,936	1,003	1	Agree
8	The university has internet available to professors.	2,691	1,117	5	neutral

9	Professors are trained to use electronic methods (videoconferencing, distance education ...) to benefit from them at no cost.	3,489	1,104	4	Agree
Technological dimension		3,544	0,718	//	medium
Organizational dimension					
10	The organizational structure is designed in line with the requirements of the HR reengineering programs.	3,223	0,974	4	neutral
11	Jobs within the university are characterized by the flexibility to adapt to new changes.	3,372	1,126	2	neutral
12	The university seeks to adopt new organizational structures.	3,361	1,014	3	neutral
13	Looks at the current working procedures that do not hinder the introduction of any new program.	3,510	0,912	1	Agree
14	The university's organizational structures include clear incentive programs to encourage creativity.	3,074	1,138	5	Neutral
Organizational dimension		3,308	0,772	//	Medium
The total dimension of human resources re-engineering		3,435	0,669	//	Medium

Source: prepared by researchers with the help of the results of the spss program.

The human dimension: we notice from the above table that its level was **medium**, and it came with a median (**3,457**) and a standard deviation (**0,776**), where the study sample expressed its agreement with the importance of implementing programs for running the career path at the university and seeking to change the basics of work to reduce red tape, whereas, the university must strive to attract qualified professors and train

them on various software and modern systems to advance the university to keep pace with the knees.

The technological dimension: its level was also **medium**, with a median (3,544) and a standard deviation (0,718), meaning that the university is far from the required level, we noticed that the studied sample acknowledges that the technology used helps reduce costs, improve performance, and support all jobs, but the problem associated with this dimension is the professors' assertion that they do not have access to the Internet at the university and make it limited to administrative work only, which reduces the performance and interaction with students within the department in development in line with the global technological development, this requires the university to take urgent corrective measures.

Organizational dimension: it had a medium level, with a median (3,435) and a standard deviation of (0,669), the general trend was **neutral**, where the sample expressed its agreement to seek to adopt new organizational structures, while the university should consider improving work procedures and adapting them to the new changes, and reconsidering the incentive and bonus programs within them to improve performance and increase the satisfaction rates of professors.

Level of job satisfaction at the university: This variable consists of (16) paragraphs, arranged from paragraph (15) to paragraph (30), we'll measure the medians and standard deviations of this sample, and the results are shown below:

Table (7): the medians and standard deviations of the items of the job satisfaction variable

number	Paragraphs	Medians	Standard deviation	arrangement	General level
15	the wage I earn is considered be satisfactory to me	3,202	1,196	9	Neutral
16	I get paid commensurate with the importance of my job.	3,053	1,247	12	Neutral
17	My wages are proportional to the effort expended.	2,946	1,314	13	Neutral
18	My job has appropriate bonuses.	3,074	1,147	11	Neutral
19	Environmental conditions are suitable within the university.	3,489	1,013	6	Agree

20	The university permits policy is clear.	3,851	0,829	2	Agree
21	I feel job safely at work within the university.	3,734	1,147	4	Agree
22	The university leave system is satisfactory to me.	3,734	0,941	4	Agree
23	The language of dialogue prevails in resolving disputes by work.	3,351	1,023	7	Neutral
24	My work at the university provides opportunities to invest my potential.	3,276	1,247	8	Neutral
25	Through my job, I can communicate with my co-workers.	3,766	0,897	3	Agree
26	I share information comfortably with my colleagues.	3,681	0,953	5	Agree
27	The spirit of encouragement prevails among colleagues at work.	3,340	1,083	8	Neutral
28	The promotion criteria in my work are clear.	3,851	0,747	2	Agree
29	Promotion is done on an effort basis.	3,159	1,157	10	Neutral
30	Promotion opportunities are available to all without discrimination.	3,989	0,809	1	Agree
All level of job satisfaction		3,468	0,689	//	Medium

Source: prepared by researchers with the help of the results of the spss program.

The result shows that the research sample's level of **job satisfaction** at the university was medium, with a score of it **(3,468)** and a standard deviation of **(0,689)**, it can be said that job satisfaction at the university achieves acceptable levels, where the sample expressed its agreement on several indicators, the most important of which are: criteria for promotion at work and their opportunities, the university's permanence policy, their satisfaction with the way they communicate with colleagues, their sense of job security, their approval of work conditions, and their acceptance of the holidays system followed at the university. **On the other hand**, there are indications of professors dissatisfaction, the most important of which are: everything related to wages and bonuses, as it does not achieve sufficient

satisfaction for them, and this is what we have noticed in the decline of creativity, and the university must spread the spirit of encouragement among colleagues and competition to increase the productivity of the professors and his satisfaction with work.

3-3- The impact of human resource re-engineering dimensions on job satisfaction at the university:

3-3-1- The first hypothesis test yielded the following results:

Where included: "At the level of significance ($\alpha \leq 0,05$), the human dimension has no statistically significant effects on job satisfaction."

Table (8): simple regression analysis of variance to test the impact of the human dimension of re-engineering human resources on job satisfaction in the sample study

Independent variable	B	Error standard	R ²	R	The calculated value of t	Significance level t
The human dimension	0,548	0,073	0,381	0,617	7,526	0,00
The dependent variable job satisfaction	tabular value of t at the level of significance ($\alpha \leq 0,05$) and degree of freedom (1,93) = 1,671 Statistical significance at the level of significance ($\alpha \leq 0,05$)					

Source: prepared by researchers with the help of the results of the spss program

We notice that there is a statistically significant impact of the human dimension on job satisfaction of the sample study, this is based on the measured value **T(7,526)** greater than its tabular value of (**1,671**), as well as a degree of morale (**0,00**) being lower than the imposed level of morale (**0,05**), also, a value of **R (0,617)** means that the association between the variables is strong and that there is a direct relationship between the two variables, while a value of **B (0,548)** indicates that any change in the human dimension in one unit would result in a change in work satisfaction by one unit (**0,548**).

As a consequence, we dismiss the **null hypothesis** and support the **alternative hypothesis**, which states that "the human dimension has a statistically significant impact on job satisfaction at the level of significance ($\alpha \leq 0,05$)."

3-3-2- The second hypothesis test yielded the following results:

Where included: "At the level of significance ($\alpha \leq 0,05$), the **technological dimension** has no statistically significant effects on job satisfaction."

Table (9): simple regression analysis of variance to test the impact of the technological dimension of re-engineering human resources on job satisfaction in the sample study

Independent variable	B	Error standard	R ²	R	The calculated value of t	Significance level t
The human dimension	0,579	0,080	0,364	0,603	7,250	0,00
The dependent variable job satisfaction	tabular value of t at the level of significance($\alpha \leq 0,05$) and degree of freedom (1,93) = 1,671 Statistical significance at the level of significance ($\alpha \leq 0,05$)					

Source: prepared by researchers with the help of the results of the spss program

We notice that there is a statistically significant impact of the technological dimension on **job satisfaction** of the sample study, this is based on the measured value **T(7,250)** greater than its tabular value of **(1,671)**, as well as a degree of morale **(0,00)** being lower than the imposed level of morale **(0,05)**, also, a value of **R (0,603)** means that the association between the variables is strong and that there is a direct relationship between the two variables, while a value of **B (0,579)** indicates that any change in the technological dimension in one unit would result in a change in work satisfaction by one unit **(0,579)**.

As a consequence, we dismiss the **null hypothesis** and support the **alternative hypothesis**, which states that "the technological dimension has a statistically significant impact on job satisfaction at the level of significance ($\alpha \leq 0,05$)."

3-3-3- The third hypothesis test yielded the following results:

Where included: "At the level of significance ($\alpha \leq 0,05$), the organizational dimension has no statistically significant effects on job satisfaction."

Table (10): simple regression analysis of variance to test the impact of the organizational dimension of re-engineering human resources on job satisfaction in the sample study

Independent variable	B	Error standard	R ²	R	The calculated value of t	Significance level t
The organizational dimension	0,574	0,71	0,413	0,642	8,040	0,00
The dependent variable job satisfaction	tabular value of t at the level of significance ($\alpha \leq 0,05$) and degree of freedom (1,93) = 1,671 Statistical significance at the level of significance ($\alpha \leq 0,05$)					

Source: prepared by researchers with the help of the results of the spss program

we notice that there is a statistically significant impact of the organizational dimension on **job satisfaction** of the sample study, this is based on the measured value **T(8,040)** greater than its tabular value of **(1,671)**, as well as a degree of morale **(0,00)** being lower than the imposed level of morale **(0,05)**, also, a value of **R (0,642)** means that the association between the variables is strong and that there is a direct relationship between the two variables, while a value of **B (0,574)** indicates that any change in the organizational dimension in one unit would result in a change in work satisfaction by one unit **(0,574)**.

As a consequence, we dismiss the null hypothesis and support the alternative hypothesis, which states that "the organizational dimension has a statistically significant impact on **job satisfaction** at the level of significance ($\alpha \leq 0,05$)."

Conclusion

The interest in **re-engineering human resources** is one of the requirements of the contemporary environment, especially for public institutions that must be interested in investing in their human resources to achieve success, excellence and increase creativity, by raising the levels of **job satisfaction** in various dimensions (wages, promotion, co-workers, and the conditions and nature of work), we tried to test this in the Faculty of Economic, Commercial and Management Sciences at the University of **M'sila**, and we arrived at a host of **conclusions**, the most important of which are:

- The **re-engineering of human resources** is achieved at a **medium** level in the institution under study, in addition to its dimensions (**the human**

dimension, the technological dimension, the organizational dimension) that have been achieved at **medium** and close levels, this is due to several negative indicators according to the opinion of the study sample, the most important of which are: lack of recruiting qualified **professors** and their lack of training on various modern software and systems, the absence of the internet for university **professors** and its availability only for administrative departments, and the failure to improve work procedures to adapt them to the new changes, in addition to the failure to improve the system of incentives and rewards, which reduces their levels of **satisfaction**.

- **Job satisfaction** is achieved at a **medium** level in the institution under study, and the most important negative indicators associated with it in the institution are: lack of wages, bonuses, and promotions, which led to a decline in their level of creativity, in addition to not creating the spirit of competition and encouragement among colleagues, and this is what we explain with the **medium** level of **job satisfaction** as mentioned previously.

- In the Faculty of Economic, Commercial, and Management Sciences at the University of M'sila, the extent of the dimensions of **human resources re-engineering** (the human dimension, the technical dimension, and the organizational dimension) separately has a statistically important effect on **job satisfaction**.

In light of the results reached, the following **suggestions** can be made:

- The university must be keen to attract qualified **professors**, train them well on various software and modern systems, support them with advanced means, and provide the internet on an ongoing basis to improve communication with students.

- Reconsidering the management structure and jobs within a university, and improving work methods to keep pace with the continuous developments and changes resulting from the huge information explosion.

- Reconsidering the incentives, compensation, and wage increase system, which leads to an increase in levels of **satisfaction**, in a way that guarantees the renewal of the intellectual and creative energies of university **professors**, and reduces the levels of brain drain, and makes the best use of it.

- The university must be keen to create a spirit of competition between **professors** and encourage them to persevere and continue to improve the educational level at the university.

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