

Professional Exhaustion in Teachers of higher Education: The case of USMBA teachers

L'épuisement professionnel chez les enseignants du supérieur: Cas des enseignants de l'USMBA

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Abstract

A widespread phenomenon or the disease of the century, stress or commonly called “fatigue” is an increasingly popular issue. We all experience times of stress or hyperactivity, more or less intense, forcing us to tap into our energy reserves which are far from being inexhaustible. Stress is, therefore, recognized as a significant problem among teachers. In fact, the various tasks and responsibilities assigned to them regularly, the complex development of the educational system, and the health crisis linked to COVID 19, put them in situations demanding permanent efforts that undoubtedly generate stress. All these parameters are the basis of our research. Studying professional burnout among higher education teachers at Sidi Mohammed Ben Abdellah University is timely and important. The survey is meant to investigate the real mind of teachers at Moroccan University. The choice of the Likert scale is justified by our concern to bring our statistical results showing their level of stress. 60 university professors of different disciplines and different higher education institutions responded to the survey.

Keywords: Burnout; Stress; Higher Education; Professors; Performance.

Résumé

Phénomène à la mode, ou maladie du siècle, le stress ou communément appelé à tort « fatigue » est un sujet de plus en plus en vogue. Nous vivons tous des moments de stress ou d'hyperactivité, plus ou moins intenses, nous obligeant à puiser dans nos réserves d'énergie qui sont loin d'être inépuisables. Le stress est, ainsi, reconnu comme un problème important chez les enseignants. En effet, quotidiennement, les diverses tâches et responsabilités qui leur sont assignées, le développement complexe de notre système éducatif, la crise sanitaire liée à la COVID 19, les placent face à des situations exigeant un effort permanent et pouvant engendrer du stress. L'ensemble de ces paramètres est à l'origine de notre recherche. Nous nous sommes fixé comme mission d'étudier ce phénomène de l'épuisement professionnel chez les enseignants du supérieur à l'Université Sidi Mohammed Ben Abdellah. Notre enquête se veut une lecture de la réalité des enseignants. Le choix du questionnaire à l'échelle de Likert a pour but de ressortir des résultats statistiques montrant les sources et les niveaux de stress. 60 enseignants de diverses disciplines et divers statuts exerçant dans les établissements de l'USMBA ont répondu à notre questionnaire.

Mots clés : Stress ; Épuisement professionnel ; Professeur ; Enseignement Supérieur ; Performance.

Introduction

It is recognized that "The quality of life at work represents the state of balance between the goals of the organization and the needs of the individual" (Dolan L. S., Lamoureux G., 1990). However, the demands of life bring as many disadvantages as benefits to human health. Indeed, the high pace of professional challenges, the need for performance, and the race for a socially recognized status, might cause deterioration in performance due to various health problems including stress.

Many studies have, therefore, noted the extent of the health problems associated with the organization. Today we talk about stress or burnout. This is where our work fits.

We all experience times of stress or hyperactivity, more or less intense, forcing us to tap into our energy reserves which are far from being inexhaustible. We are often unaware of our state of stress when we are under considerable pressure that affects our health, performance, and relationship with others. Consequently, this research aims at investigating the factors that lead to stress and burnout among university teachers at USMBA.

Moreover, we have opted for a non-probability convenience sampling technique for some factors; such as easy accessibility, geographical proximity, availability to conduct the research, and the respondents' willingness to participate in our study.

To meet the objective of our research, we sought to answer the following questions:

- 1- Do university teachers master the concept of stress and distinguish it from that of fatigue?
- 2- Are women more prone to stress than men? Are they predisposed to stress because of their double responsibility?
- 3- Can we consider the professional environment a source of stress?
- 4- Do age and experience play a role in the intensity of stress?
- 5- Do interpersonal relationships, organization, and working conditions influence teachers in the same way regardless of their gender, age, and experience?
- 6- What is the impact of stress on teachers' relationships with others, on their performance and behavior?

We will therefore first define stress and describe its manifestations and symptoms in order to distinguish it from the notion of exhaustion, then we will deal with stress in the workplace or burnout. After that, we will try to identify the different sources of stress at the organizational

level. Before presenting and discussing the results of our survey, it will be a question of giving a brief overview of our research tool (survey), our sample as well as the different variables that we propose to study.

1. Historical overview and definition of stress:

The story began in a physiology laboratory in Canada. H. SELYE, following studies on rats notes that the deterioration of their health is, in fact, "*a mechanism of adaptation facing aggressive agents, a non-specific response that our body gives to any request that it receives.*" (Legron P., 2001). He called this reaction a "*general adaptation syndrome*". The common use of the term "stress" appeared around the 1940s. As for the origin of the word stress:

- The word stress comes from the Latin *estress*;
- "narrowness or oppression" (Ceccaldi P., Diriq A., Bagieu C., 2000);
- "From an emotional consequence, stress becomes a cause: It is then an immaterial pressure, a force of impulse".

1.1. The biological process of stress:

During the 1920s, physiologist W. Cannon demonstrated that manifestations of fear, escape, or attack were caused by the release into the blood of a hormone called adrenaline. It is released by the nervous excitement of the adrenals. He was able to prove the relationship between psyche and soma by injecting adrenaline into a resting cat what provoked:

- An acceleration of heartbeats and breathing;
- A flow of blood to the heart and muscles;
- The bristling of hairs;
- The dilation of the pupils;
- An increase of sugar in the blood.

W. Cannon spoke of ***stress of excitement***, of *emotional stress*. For him, it is a response to physical (hypoglycemia, cold, lack of oxygen) and emotional stimuli. He even goes so far as to distinguish *the stress variable (more or less long) from fixed stress (punctual)*.

However, it is thanks to H. Selye that we come to understand the series of physiological reactions that push the body to translate a mental state into a visceral reaction. His work, Encouraged by W. Cannon and G. Banting, led to the current definition of stress:

“A reaction of the body to any sudden or rapid change in the environment, especially when it puts it under increased stress. This reaction is not only a cascade of pathological consequences, it is above all an innate means of physiological defense against external stimuli, whether positive Eustress or negative dys-stress” (Ceccaldi P., Diriq A. Bagieu C., 2000).

Stress is, therefore, far from being a pathological process. It is rather a surprising reaction of the body to adapt to the dangers and pressures of our environment. Like breathing, digestion, reproduction or immune function, stress is one of the major functions of the human body. In each stressful situation, man becomes the site of biological reactions, both nervous and hormonal. H. Selye talks about three stages in the development of general adjustment syndrome or stress:

1.1.1 An alarm or alert phase:

It is the adrenaline that allows us to act. Once our senses detect "stressors" in the environment, they transmit them to the brain, which is responsible for analyzing them. The presence of adrenaline in the blood immediately causes a series of changes in the cardiovascular, respiratory, muscular, skin, digestive, and blood levels. All of these changes instantly prepare us for brutal physical action. We then speak of "**the fight or flight response**", as Cannon had described it.

1.1.2 A phase of resistance:

When the stressor is maintained, the second biological system is put into action; the brain is always, of course, the starting point. Indeed, you have to be able to "hold on" to the stressor. Thus, adrenaline "uses" immediately available reserves to perform "urgent" action. It works in a situation of **acute stress** and helps **act on** the stressor. As for glucocorticoids, they manage stewardship on the back of the forehead by supplying themselves from established reserves. Glucocorticoids come into play for **chronic stress** and prepare us not to act, but **to endure**.

1.1.3 The exhaustion phase: "too much is too much":

When the person is overwhelmed by the situation, her body eventually wears itself out. In the resistance phase, the vital excess energy supplied by the body damages the integrity of the organs as well as the immune system. This causes psychosomatic affections.

The transition to the exhaustion phase occurs when the body is no longer able to provide the necessary energy to resist the stressor. In the workplace, this is called **burnout or professional attrition**.

Stress levels vary from person to person depending on their ability to cope with stressful situations which also depends on one's general balance. Everyone has their own resistance to stress: that is, an amount of stress that they can endure while functioning harmoniously. There are three levels of stress and the related level of performance:

❖ **Below the optimal threshold**, the body is not sufficiently stimulated, both physically and mentally. This inactivity manifests itself in exhaustion, boredom, demotivation, and ultimately apathy and even depression; which usually happen when an individual does a job that falls short of their skills.

❖ **At the optimal stage**, the person's motivation and effectiveness are evident. The person is then able to make a reliable judgment. His perception of things is clear. He is then able to show greater flexibility regarding possible changes at the level of work.

❖ **Once the optimal threshold is exceeded**, the body is over-stimulated, and overworked, which generally leads the person to lose self-confidence, to have a feeling of exhaustion, irritability and difficult relationships with those around him. Difficulties in making decisions are also manifested, and in extreme cases, this can lead the person to depression, phobias and therefore to burnout.

1.2. Burnout or professional exhaustion:

The term burnout did not appear in the scientific literature until 1974. This expression is used in the professional environment to designate the state of some people with regard to their employment. "Professional stress is one of the most widespread psychosocial risks in workplaces and the consequences of which are costly for the company" (Saoussany & Assbayou, 2019).

It is a state of physical, emotional, and mental exhaustion at work. It sets in gradually. The person is overcome by feelings of emptiness, negative self-concept and others, which gives the impression of failure and dissatisfaction in the pursuit of his ideal.

Burnout indicates the limit beyond which work no longer provides the desired satisfaction.

2. Sources of stress in organizations:

2.1. Organizational risk factors for burnout:

Several sources of professional and organizational stress were highlighted, in particular, those inherent in the function performed, the role of the organization and its structure, career

development as well as interpersonal relationships at work. This gives rise to psychological health problems at work.

2.1.1. Qualitative and quantitative overload and underload:

Individuals, in addition to having to multitask as part of their job, are also under pressure at several levels. The volume of activities, the complexity of the work, the demand for concentration, as well as the pressure of time, push him to put in more effort to maintain his performance and the quality of his work. But lacking the skills and knowledge to manage this overload, an individual may experience a feeling of ineffectiveness that is detrimental to their performance and, indeed, to their health.

In addition, irregular working hours can make it difficult for individuals to reconcile their professional and personal responsibilities. Excessive hours of work do not necessarily lead to increased productivity but rather possible accidents at work, as well as reduced performance and motivation.

At the same level as overload, underload and the mismatch of skills for the job, give the individual a feeling of boredom, demotivation and decrease job satisfaction.

2.1.2. The physical environment and working conditions:

Employees working in an unhealthy physical environment and in difficult working conditions are subject to physical and mental health problems. Noise, heat, humidity, poor lighting, and inadequate ergonomics are all sources of discomfort at work.

2.1.3. Lack of appreciation and recognition of its worth:

The employees expect more recognition for their efforts. These signs of recognition can be both moral (tokens of appreciation, verbal or non-verbal encouragement), or material (salary increase, career opportunities, etc.). They also manifest themselves in the creation of a communication space where individuals can express themselves about their work. Indeed, with the increased demands of the job and in the absence of encouragement, the person risks losing motivation and energy at work.

2.1.4. Career development and communication:

Lack of job security, promotions and advancement opportunities also cause stress at work. Indeed, the fear of losing one's job increases the level of tension of the employee. The uncertainty about his career development, the disparity between his current situation and the one he expects is also a source of tension.

In addition, the lack of information about himself, his work, and his career development can increase the employee feeling of insecurity. Indeed, involving them in the decision-making process, allowing them easy access to information, and discussing their work problems improve communication, their level of satisfaction, and consequently their performance.

2.2. Interpersonal relationships:

As part of their role, the quality of relationships and interactions that members of the organization maintain can have an impact on their mental health.

2.2.1. The relationship with colleagues:

The feeling of belonging to the group allows individuals not only to feel recognized and valued, but also to obtain the support they need during difficult times in their career. In addition, unhealthy competition, lack of solidarity, the presence of difficult personalities, and a bad atmosphere can increase the risk of stress at work.

2.2.2. The relationship with superiors:

It is likely to cause tensions due to the management style which does not favor employees' participation in the various decisions affecting them. The lack of signs of recognition, the lack of skills (technical, managerial ...), difficult personalities, high demands, as well as harassment, are all stressful factors.

Furthermore, when the individual finds himself in a situation where the expectations of his superiors and those of his colleagues are incompatible or contradictory, we speak of role conflict. These expectations may also be at odds with one's values, beliefs, or even goals. When the individual is uncertain about the expectations he may have, the tasks and responsibilities incumbent upon him, we speak of role ambiguity.

3. Sources of stress in higher education teachers: survey results:

3.1. Research methodology: Presentation of the sample and the measurement tool:

Stress at work, especially in education, which is one of the most stressful occupations, is considered to be a major contributor to negative behavior at work. It is therefore necessary to elucidate the different sources in order to better identify, understand, and eventually overcome them.

The objective of this work is to identify the sources of stress among University Sidi Mohamed Ben Abdellah teachers.

3.2. The survey: measurement tool:

This study is based on a survey as a measurement tool. It is a fast and effective tool for collecting information. It not only makes it possible to verify, confirm and / or invalidate the initial hypotheses, but also to relate two or more variables.

As part of social science research, and aimed at measuring the behavior of respondents, a Likert-scale questionnaire was adopted. The questionnaire consists of 37 statements to which respondents have to indicate their level of agreement. The scale is 5 levels ranging from "strongly disagree" to "strongly agree". The statements are grouped into six sections, preceded first by an introduction specifying the scope and objective of the research and then by a certain amount of information on the identity of the respondents.

The first section of the questionnaire concerns the definition of stress. The second section deals with the organization of work, time management, and interpersonal relationships. The last section is devoted to behavioral manifestations of stress.

It should be noted that the survey is anonymous in order to ensure the collaboration of the respondents. The time required to fill it in is approximately five minutes.

3.2.1. Definition of stress:

The notion of stress and exhaustion are often confused; it is often seen as negative. It was therefore necessary to start this questionnaire with a section reserved for the definition of stress. This includes 5 statements to check the level of mastery of the concept of stress.

Between feeling tired, stimulating or the body's reaction to any external or internal stimulus, the responses varied according to the respondents.

3.2.2. Questions about sources of stress:

This section contains 26 questions. These are classified in 4 parts according to the sources of stress.

❖ **Working conditions and organization:** Composed of nine questions on the organization of work in the various establishments, particularly in the context of the health crisis due to COVID19. This part aims to identify and measure the sources of stress at work among teachers. Respondents were asked to indicate, on the 5-point scale, to what extent working conditions affect the quality of their working life.

These sources relate, among other things, to the work environment (face-to-face and remote), schedules, and communication within their organizations.

❖ **Time management:** Time being considered as one of the factors generating stress, we sought to determine how everyone succeeds to manage their time and to what extent this can affect their health.

❖ **Interpersonal relationships:** As the nature of the relationship maintained with professional entourage is decisive in the psychic balance of the person, it was deemed necessary to include a part relating to interpersonal relationships.

This section is divided into two parts. One relating to the relationship with colleagues which contains seven statements concerning, in particular, the nature of competition, teamwork, and the various emotions felt in the progression of their work. The second section concerns the relationship with the students. It contains five statements aimed at determining students' behaviors that may be a source of stress for teachers.

At the end of the questionnaire, we have a section devoted to the reaction to stress. Between nervousness, irritability, or simply a feeling of great exhaustion, the reactions are as diverse as people prone to professional stress.

3.3. Identification of the analysis sample and the variables measured:

The surveyed population is made up of teachers working in certain institutions of Sidi Mohammed Ben Abdellah University in Fez. The sample size is 90 teachers. Two-thirds of the people we approached answered our survey. Therefore, the actual sample used for the current study is 66 respondents which give us a response rate of 66.66%.

Information relating to identity (age, sex, years of experience, discipline, grade, and institution) represent the different variables according to which we sought to measure the level of stress:

❖ **Institutions:** These teachers work in the following institutions:

1. Higher School of Technology and National School of Commerce and Management;
2. Faculty of Sciences and Techniques and Faculty of Sciences;
3. Faculties of Letters.

❖ **Gender:** The sample is made up of 31 women and 29 men, i.e. 51.7% women and 48.3% men.

❖ **Age:** The age of our respondents varies between 26 and 56 years old. Average age is 39 years old.

❖ **Seniority:** The fourth variable studied is the number of years of practice of the

respondents. They have an experience ranging from 1 year to 26 years. More than half of the population (55%) has more than 12 years of experience. So, for a better reading of the results, we have grouped the data into only two classes, those with less than 12 years of experience and those with more than 12 years of experience.

❖ **Rank:** Our objective is to verify whether the rank and status of people surveyed are factor of "burnout".

❖ **Discipline:** We know that teaching is ranked among the ten first jobs where people are most exposed to stress. However, one wonders if stress is of the same magnitude regardless of the discipline taught. The sample for this study consists of teachers from different disciplines; such as computer science, mechanics, biology, economics and finance, electronics and electrical engineering as well as languages and expression and communication techniques.

3.4. Results and analysis of the survey data:

We looked at the major sources of stress for teachers. Here we describe the results of our investigation. Overall, teachers report a level of stress between medium to high. The following table summarizes the results of the survey without considering the variables. It indicates the most frequently cited modalities in teachers' responses and therefore highlights the main sources of stress and the level (on the Likert scale of 1 to 5) associated with each factor.

Table 1: Summary of the survey results

| | Modalité citée en n° 1 | Modalité citée en n° 2 | Modalité la moins citée | Non-réponses |
|---|---------------------------|---------------------------|--------------------------|--------------|
| SEXE | Féminin : 31 | | Masculin : 29 | 0 |
| Le stress est un stimulant. | Pas du tout d'accord : 16 | Peu d'accord : 12 | Pas d'opinion : 3 | 6 |
| Le stress est la sensation d'une fatigue | D'accord : 20 | Pas du tout d'accord : 14 | Pas d'opinion : 4 | 2 |
| Le stress est toujours négatif | Pas du tout d'accord : 21 | Peu d'accord : 12 | Pas d'opinion : 5 | 2 |
| Le stress est un facteur de réussite dans | Pas du tout d'accord : 15 | Peu d'accord : 14 | Tout à fait d'accord : 6 | 4 |
| Le stress est une réaction du corps à to | D'accord : 21 | Tout à fait d'accord : 16 | Peu d'accord : 4 | 4 |
| Environnement du travail | D'accord : 21 | Tout à fait d'accord : 17 | Pas du tout d'accord : 3 | 3 |
| Nature répétitive des tâches, monotonie. | D'accord : 16 | Pas du tout d'accord : 15 | Pas d'opinion : 8 | 2 |
| Surcharges horaires | D'accord : 26 | Tout à fait d'accord : 14 | Pas du tout d'accord : 3 | 3 |
| Responsabilités inadéquates avec vos in1 | D'accord : 15 | Pas d'opinion : 12 | Peu d'accord : 7 | 5 |
| Hiérarchie. | D'accord : 16 | Pas d'opinion : 15 | Peu d'accord : 5 | 3 |
| Complexité du travail, tâches multiples | D'accord : 16 | Pas du tout d'accord : 10 | Peu d'accord : 8 | 8 |
| Mauvaise communication interne. | D'accord : 16 | Tout à fait d'accord : 15 | Pas du tout d'accord : 5 | 4 |
| Vous avez le sentiment de sous-utiliser | D'accord : 17 | Pas du tout d'accord : 15 | Peu d'accord : 3 | 2 |
| La perception de votre avancement est pe | Tout à fait d'accord : 17 | Pas du tout d'accord : 12 | Peu d'accord : 7 | 5 |
| Vous vous sentez coupable de ne pas cons | Pas du tout d'accord : 28 | D'accord : 12 | Tout à fait d'accord : 4 | 4 |
| Vous n'avez jamais le temps de faire tou | D'accord : 20 | Tout à fait d'accord : 14 | Pas d'opinion : 6 | 4 |
| Vous êtes toujours ordonné et ponctuel. | D'accord : 18 | Tout à fait d'accord : 14 | Pas du tout d'accord : 4 | 3 |
| Vous arrivez à gérer votre temps (respon | D'accord : 20 | Tout à fait d'accord : 15 | Pas du tout d'accord : 4 | 4 |
| Vous travaillez toujours au dernier mome | Pas du tout d'accord : 22 | Peu d'accord : 11 | Pas d'opinion : 6 | 4 |
| Vous vous sentez marginalisé dans votre | Pas du tout d'accord : 33 | Pas d'opinion : 8 | Peu d'accord : 3 | 5 |
| Vous remarquez l'existence de concurr | Pas du tout d'accord : 16 | Peu d'accord : 11 | Tout à fait d'accord : 8 | 5 |
| Vous détestez vous trouver en compétitio | Pas du tout d'accord : 36 | Pas d'opinion : 10 | Tout à fait d'accord : 1 | 5 |
| Vous supportez mal les critiques. | Pas du tout d'accord : 23 | Peu d'accord : 17 | Tout à fait d'accord : 3 | 4 |
| Vous aimez travailler en équipe, | Tout à fait d'accord : 28 | D'accord : 21 | Peu d'accord : 2 | 2 |
| Vous ne savez pas dire non et vous en so | Pas du tout d'accord : 18 | Tout à fait d'accord : 14 | Pas d'opinion : 5 | 4 |
| Vous vous sentez frustré | D'accord : 24 | Pas du tout d'accord : 13 | Pas d'opinion : 4 | 5 |
| Etudiants bruyants et indisciplinés. | Pas du tout d'accord : 25 | Peu d'accord : 15 | Pas d'opinion : 2 | 4 |
| Nombre élevé d'étudiants par classe. | Tout à fait d'accord : 19 | D'accord : 14 | Pas d'opinion : 2 | 2 |
| Manque de motivation des étudiants, dési | D'accord : 20 | Tout à fait d'accord : 20 | Pas d'opinion : 3 | 2 |
| Difficulté à maintenir la discipline. | Pas du tout d'accord : 37 | Peu d'accord : 10 | D'accord : 2 | 4 |
| Niveau des étudiants | D'accord : 18 | Tout à fait d'accord : 16 | Pas du tout d'accord : 6 | 7 |
| Nervosité | Pas du tout d'accord : 27 | d'accord : 10 | peu d'accord : 3 | 4 |
| Irritabilité | peu d'accord : 19 | d'accord : 18 | Pas du tout d'accord : 6 | 3 |
| Prise de décision | Pas du tout d'accord : 25 | D'accord : 10 | Tout à fait d'accord : 3 | 4 |
| Sentiment d'inefficacité | Pas du tout d'accord : 31 | Peu d'accord : 8 | Tout à fait d'accord : 3 | 5 |
| Affaiblissement mental | Pas du tout d'accord : 17 | Peu d'accord : 13 | Pas d'opinion : 7 | 3 |
| Epuisement | Tout à fait d'accord : 28 | D'accord : 17 | Pas d'opinion : 4 | 1 |

Source: Sphinx

3.4.1. Sources of stress by gender:

The most frequently cited key sources of stress by gender are presented in the table below:

Table 2: Summary of sources of stress among university teachers

| Stressors | Stress level (percentage) | Female Teachers | Male Teachers |
|--|---------------------------|-----------------|---------------|
| You like to work in a team; competitive relationships, push you to give the best of yourself. | 49 % | 80 % | 82,8 % |
| Lack of motivation of students | 40 % | 70 % | 62 % |
| Surcharge, schedules. | | 64,5 % | |
| Work environment (noise, ventilation, lack of material, resources,). | 38 % | 67,7 % | 58,8 % |

| | | | |
|--|-------------|---------------|---------------|
| Time management (family and professional responsibility). | 35 % | 54,8 % | 62% |
| Students' level | 34 % | 51,6 % | 62,1% |
| High number of students per class | 33 % | 61,3 % | 48,3% |
| Poor internal communication | 30 % | 58,1 % | 17% |
| Feeling of frustration: lack of signs of recognition | 24 % | 73,9 % | 45,1 % |
| Feeling of underutilizing your potential, you lack the possibility for creativity | 17 % | 51,4% | 55,1 % |
| Not knowing how to say no and suffer from it | 14 % | 42 % | 41,4 % |

Source: by us

Through this classification of the stress factors most cited by teachers, we can conclude that female teachers at Sidi Mohammed Ben Abdellah University are more prone to professional burnout than male teachers, particularly with regard to the need of recognition cited in second position by female teachers (73.9%) and found in 7th position among teachers with a percentage of 45.5%. However, if the same sources were cited, the difference lies in the rates found among female teachers.

Teachers, for their part, manage their time better, cited in 3rd position with a percentage of 62%. This is probably due to the multitude of tasks of the teachers for whom it is noted in 8th position 54.8%.

3.4.2. Sources of stress by age:

Table 3: Summary of sources of stress among university teachers by age

| Stressors | Teachers under 36 | Teachers over 36 |
|---|--------------------------|-------------------------|
| You like to work in a team; competitive relationships push you to give the best of yourself. | 79 % | 84,6 % |
| Lack of motivation of students Surcharge, schedules. | 68,4% | 64,1% |

| | | |
|---|---------------|---------------|
| Students' level | 63,2 % | 51,2 % |
| High number of students per class | 68,5 % | 48,3 % |
| Poor internal communication | 57,9 % | 51,3% |
| Feeling of frustration: lack of signs of recognition | 26,3% | 56,4% |
| Feeling of underutilizing your potential, you lack the possibility of creativity | 52,6% | 31,6% |
| Not knowing how to say no and suffering from it | 36,8% | 41,4 % |
| Work environment (noise, ventilation, lack of material resources...) | 68,5% | 61,5 % |
| Time management (family and professional responsibility) | 42,1% | 64,1% |

Source: by us

Age is the second variable that has a significant influence on the perception of stressors. Teachers under 36 show a greater vulnerability to certain sources of stress compared to their elders. If the over 36s ranked “work environment” in 4th position, “the number of students” in 8th position and the “feeling of underutilization of their potential” 1 in 9th position, those under 36 cite them respectively in 2nd and 4th position with relatively high percentages. The “feeling of underutilization of their potential” arises from the gap between their current situation and the desired one as well as inadequate responsibilities with their motivation and personal interests.

This could be due to the adaptation phase that teachers under 36 need in their work environment. The current result will be supported by the conclusion of the study of the seniority variable.

The only source of stress with the same rank in both age groups is “teamwork” (with high percentages); This shows that regardless of age (gender or length of experience), teachers at USMBA appreciate and seek high levels of stress (positive stress) to maintain their performance.

3.4.3. Sources of stress according to seniority:

Teachers with less than 12 years of seniority do not display a higher rate of stress than that observed among teachers of more than 12 years of seniority, except with regard to the overload, the level of students and their lack of motivation where the stress rate is relatively higher, as mentioned in table 4 below.

Teachers, at the beginning of their career (less than 12 years of service), are more concerned about their integration into their work environment, as well as the quality of their teaching.

Moreover, it is clear that the experience makes it easier for teachers to cope with the different sources of stress in academia, to develop methods to compensate for the level of students. However, this does not prevent them from being subject to stress especially in the absence of signs of recognition and encouragement. Their seniority allows them to become acclimatized and have more familiarity with the tasks and the organization. Their experience also gives them more skills, and thus, more confidence and assurance.

Although the intensity of stress is significantly different depending on seniority, three factors remain the essential vehicle of stress, namely teamwork, overload, lack of motivation of students as well as the work environment (noise, ventilation, lack of resources, or lack of skills to provide their course remotely via the available platforms). We can also note, by comparing the summary table of the sources of stress by age and that by seniority, the similarity of the results; which support the veracity of the results obtained in our investigation.

Table 4: Summary of the sources of stress among university teachers according to seniority

| Stressors | Teachers with less than 12 years of seniority | Teachers with more than 12 years of seniority |
|---|---|---|
| You like to work in a team; competitive relationships push you to give the best of yourself. | 74 % | 78,9 % |
| Lack of motivation of students Surcharge, schedules. | 70,3% | 63,7% |
| Work environment (noise, ventilation, lack of material resources...). | 62,9% | 63,6 % |
| | | |

| | | |
|---|---------------|----------------|
| Time management (family and professional responsibility) | 55,5% | 60,6% |
| Student level | 62,9% | 51,6 % |
| High number of students per class | 62,9% | 48,5 % |
| Poor internal communication | 55,5 % | 48,4% |
| Feeling of frustration: lack of signs of recognition | 40,7% | 57,6% |
| Feeling of underutilizing your potential, you lack the possibility of creativity | 59,2% | 48, 5 % |
| Not knowing how to say no and suffering from it | 33,3% | 48,5 % |

Source: by us

Conclusion

The purpose of this study is to identify the various stressors associated with it. The results of the data highlight and measure the different sources of stress through three variables: sex, age, and seniority.

At the end of this fascinating and stressful work, we can underline the interest of the use of the statistical tool which allows not only to give the percentages of the answers but also to cross the different questions of the survey with the different variables to be studied.

The first finding reveals that teachers at Sidi Mohammed Ben Abdellah University are far from immune to the various stressors associated with their profession. The level of stress observed is average and quite high depending on its source. The results reveal that the most stressful source is teamwork, which is a positive source. It is clear that the work environment, lack of student motivation, and overload are among the most determining sources that lead to burnout. Since the students are at the center of teachers' activity, the quality of their relationship is decisive as to the satisfaction that the teacher can derive from his / her work; besides working conditions favoring the smooth running of one's work also contribute to this satisfaction.

In addition, it should be noted that an hourly load quantitatively exceeding the capacities of teachers and pushing them to act in a hasty and unorganized manner, at the expense of the quality and attention they must pay to their work, influences negatively their performance and motivation.

Furthermore, the data show that female teachers are more prone to stress than their male counterparts, it has been noted that stress or burnout, does not necessarily depend on lack of experience. Young people are not systematically more or less stressed than older people. This could be explained by the pedagogical and methodological changes with which the youngest are more familiar. The formers have the advantage of having gained more confidence in good time management. These findings are in line with those conducted by the *Observatoire Marocain du bonheur* (May 2017) which found that the main causes of professional stress are due to the feeling of overwork; the lack of means to achieve the objectives; and the lack of recognition.

As we have noticed throughout this investigation, stress at work, most of the time and to most teachers, generates a feeling of ineffectiveness and uselessness as well as diminishes performance. Mental debility and feelings of exhaustion at the end of the day were also highlighted. It has been found that teachers under 36 years of age face some difficulties related to decision-making. Women, on the other hand, in addition to the above reactions, noted that they became more irritable. These reactions depend on the strategy that each could develop according to one's personality, values, and perceptions to adapt to different situations.

The outcome of this study has some practical implications and recommendations:

- ❖ The support that could be given to teachers, regardless of their experience, age, or gender;
- ❖ Training allowing them to better identify and deal with the sources causing stress at work, but also to acquire strategies and methods of managing the relationship with their students;
- ❖ Listening to and supporting the hierarchy which is likely to reduce stress caused in particular, by the work environment and the lack of communication.

However, despite the current study's various contributions, it is not free from limitations. This work naturally leaves clues and limitations for further research. First, the present research was meant to study the sources of stress in teachers of Sidi Mohammed Ben Abdellah University. Nevertheless, the study sample is not sufficiently representative; therefore, there is a need for a more representative sample to enhance the generalizability of the research conclusions and it would be interesting to supplement this work with other research that could interest a larger sample from various Moroccan universities. It should be noted that the survey aroused the

interest of several teachers and that it made them aware of the phenomenon of burnout which they become aware of. They often confuse stress and fatigue as our survey results have shown. Second, the research has shown that there are other variables that can cause stress among university teachers; such as marital status, discipline, and institution. Future researchers may consider these variables to expand the knowledge about the sources of stress.

ANNEXES

L'épuisement professionnel (Le burnout)

Merci de bien vouloir répondre à ce **questionnaire** qui s'inscrit dans le cadre d'une recherche sur le stress dans le milieu universitaire.

Veuillez choisir une des réponses suivantes selon que vous êtes :

1. Pas du tout d'accord.
2. Peu d'accord.
3. Neutre.
4. D'accord.
5. Tout à fait d'accord.

I/ Identité :

1. Sexe : Féminin ☐ Masculin ☐
2. Age :
3. Discipline :
4. Nombre d'années d'expérience :
5. Grade :

II/ Qu'est-ce que le stress pour vous ?

| Items | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Le stress est un stimulant. | | | | | |
| Le stress est la sensation d'une fatigue générale. | | | | | |
| Le stress est toujours négatif. | | | | | |
| Le stress est un facteur de réussite dans la vie : il faut être stressé, sinon on devient mou et inefficace. | | | | | |
| Le stress est une réaction du corps à toute stimulation externe ou interne. | | | | | |

III/ Sources de stress au travail :**1. Conditions et organisation du travail : vous stressez à cause de**

| Items | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Environnement du travail (bruit, aération, le manque de ressources matérielles,...). | | | | | |
| Nature répétitive des tâches, monotonie. | | | | | |
| Surcharge, horaires. | | | | | |
| Responsabilités inadéquates avec vos intérêts et motivations personnels. | | | | | |
| Hierarchie contraignante. | | | | | |
| Complexité du travail, tâches multiples ou incompatibles. | | | | | |
| Mauvaise communication interne. | | | | | |
| Vous avez le sentiment de sous-utilisation de votre potentiel, vous manquez de possibilité de créativité. | | | | | |
| La perception de votre avancement est peu rapide. | | | | | |

2. Gestion du temps :

| Items | 1 | 2 | 3 | 4 | 5 |
|-------|---|---|---|---|---|
|-------|---|---|---|---|---|

| | | | | | |
|--|--|--|--|--|--|
| Vous vous sentez coupable de ne pas consacrer assez de temps à votre travail. | | | | | |
| Vous n'avez jamais le temps de faire tout ce que vous voudriez faire : chaque fois que c'est possible, vous essayez de mener deux ou trois tâches en même temps. | | | | | |
| Vous êtes toujours ordonné et ponctuel. | | | | | |
| Vous arrivez à gérer votre temps (responsabilité familiale et professionnelle). | | | | | |
| Vous travaillez toujours au dernier moment, car c'est ainsi que vous êtes le plus performant. | | | | | |

Relations interpersonnelles :**A. Avec les collègues :**

| Items | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Vous vous sentez marginalisé dans votre travail, sentiment d'un manque d'équité de la part de la hiérarchie. | | | | | |
| Vous remarquez l'existence de concurrence malsaine entre collègues, de personnalités difficiles... | | | | | |
| Vous détestez vous trouver en compétition car vous êtes sûr de ne pas gagner, vous supportez mal les échecs. | | | | | |
| Vous supportez mal les critiques. | | | | | |
| Vous aimez travailler en équipe, les rapports de compétition vous poussent à donner le meilleur de vous-même. | | | | | |
| Vous ne savez pas dire non et vous en souffrez. | | | | | |
| Vous vous sentez frustré : manque de signes de reconnaissances, d'encouragements... | | | | | |

B. Comportement des étudiants :

| Items | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Etudiants bruyants et indisciplinés. | | | | | |
| Nombre élevé d'étudiants par classe. | | | | | |
| Manque de motivation des étudiants, désintérêt. | | | | | |
| Difficulté à maintenir la discipline. | | | | | |
| Niveau des étudiants. | | | | | |

IV/ Réaction au stress :**Comment réagissez-vous dans une situation de pression au travail ?**

| Items | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Nervosité : réaction explosive, gestes regrettables, langage plus dur, agressivité. | | | | | |
| Irritabilité : moins de patience, de tolérance, difficultés à supporter les contrariétés. | | | | | |
| Difficulté dans la prise de décision. | | | | | |
| Sentiment d'inefficacité, d'inutilité, diminution du rendement, négligence professionnelle, perte du sens de responsabilité. | | | | | |
| Affaiblissement mental : perte d'enthousiasme, démotivation. | | | | | |
| Épuisement en fin de journée, grande fatigue, | | | | | |

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