## Has the pandemic affected the motivation and job satisfaction of university researchers? A case study from France

## **Abstract**

The purpose of this study is to determine whether the pandemic affects the motivation and job satisfaction of university researchers as a whole and by their separate groups by gender, age, academic position (career stage), and degree. For this, two hypotheses were tested, using the one-way ANOVA parametric test and the Kruskal-Wallis nonparametric statistical test, with the data collected during indepth interviews and surveys with university researchers from two French universities in 2019 and 2021. It was found that during the pandemic, the overall motivation and job satisfaction of all researchers did indeed change, but not significantly. However, as an in-depth analysis showed, the insignificance of general changes during the pandemic is associated with multidirectional changes in individual groups of researchers. Significant differences were found between changes in motivation and job satisfaction of respondent groups by gender, career stage, and academic qualifications. These differences in the changes observed confirm the hypothesis that the pandemic had a significant impact on certain motivators and elements of job satisfaction among various groups of university researchers. The study showed that pandemic restrictions and fears positively affected the motivation and job satisfaction of younger researchers and male researchers, while negatively affecting older researchers and female researchers. During the pandemic, early-stage researchers were mostly unhappy only about their salary and lack of teaching skills. As for experienced and senior researchers, dissatisfaction resulted from the fact they did not have time to fulfil all their duties - because of an overload arising from a combination of new forms of teaching, a large number of many teaching hours, administrative duties, and the need to master new communication tools.

## Introduction

The COVID-19 pandemic brought about a number of changes into people's lives. On the one hand, it introduced a number of several restrictions (Kaushik & Guleria, 2020) that forced representatives of many professions to master online communication and temporarily go without many of life's joys. On the other hand, it opened upopened new opportunities (Diab-Bahman & Al-Enzi, 2020) that allowed employees to perform operations without unnecessary logistics and other costs, saving resources and time. Science is a special field of activity, but it also underwent a numbersome of changes when most of the communication moved online. When we talk about science, we are usually interested in research results and findings. However, these all result from the work of people burdened with a lot of worries, e.g., financial difficulties (Yamada, 2019), extreme competition, and a lack of time for family and furthering their hopes of promotion (Nature, 2016), even if they may still have time for research. And in order for for the results of their work to be of high quality and useful for society, it is necessary that these people – researchers – are highly motivated.

University researcher is a special profession which that, in addition to involving the pursuit of scientific discoveries, requires serious teaching and supervising work in order toto convey the new knowledge gained to students and future employees. This work thus requires special skills and takes a lot of time and effort if it is to be performed to a high standard. The profession demands that the researcher work in a complex system, requiring self-discipline and an ability to concentrate on the multiple results of the work carried out, something that in turn requires strong communication skills, effective research methods, and the ability to cope with changing emotions.

Over the last fifty years, the world of higher education and research has been swept by an unprecedented wave of change. Tertiary education initially experienced a phenomenal global expansion (Schofer and Meyer, 2005); today, around the world, 20% of young people participate in tertiary education, up from less than 2% fifty years ago. In 2013, there were no fewer than 14,500 institutions of higher education in the world. In parallel with the massification and diversification of their audiences, universities have been called upon to report to their various stakeholders. After the Second World War and throughout the period of what the French call the "trente glorieuses" (1945-75), many Western countries enjoyed a flourishing economy and an unemployment rate close to zero. This period also saw massive public investment in higher education, perceived as an instrument of social ascension. At the turn

of the 1980s, with rising unemployment, rising higher education costs, and shrinking public budgets, students and their families increasingly contributed to the financing of studies, as governments sought to rationalize public spending in the sector. The combination of the exponential growth of higher education and the resulting requirement of accountability have paved the way for the emergence and development of national and international rankings.

As research shows, there is no unequivocal answer in science to the question of the influence of the motivation of university researchers on their performance. On the one hand, Akhtar and Iqbal (2017) drew on a study of 100 researchers from one university in Pakistan to prove that, statistically, university researchers' motivation has a significant impact on their job performance. This result confirmed previous conclusions by Asim (2013) for another university in the same country regarding the positive relationship between academic staff motivation and performance. Similar conclusions were obtained by Olusadum and Anulika (2018) in their study of 200 employees of a college on another continent (in Nigeria), in which the positive relationship between motivation and staff performance turned out to be significant. This conclusion received earlier support from Mawoli & Babandako (2011), whose study whose study of a sample of 219 academic staff in another Nigerian university found that the impressive working conditions and outstanding employee motivation resulted in high academic staff performance and productivity. Similar positive relationships were found for universities in Turkey (Aydın, 2012), Ghana (Kwapong et al., 2015), and Malaysia (Ghaffari et al., 2017). Moreover, the positive relationship between employee motivation and job performance was confirmed for different industries and different countries in Asia, Africa Africa, and Europe (Hemakumara, 2020; Diamantidis and Chatzoglou, 2019) with certain national differences in the level of influence of particular motivational factors.

On the other hand, Comighud and Arevalo (2020), using a descriptive-correlational method to study a sample of 89 school teachers in the Philippines, found that the relationship between the teachers' motivation and their job performance was insignificant. Besides, Jusmin (2016) drew on a sample of Indonesian private higher schools and found that work motivation had a negative and significant effect on lecture performance, while job satisfaction had a positive and significant effect on lecturer performance. Obviously, school teachersschoolteachers differ significantly from university researchers in terms of their roles and responsibilities. However, such results make us think about the individual impact of motivation on the employee performance, as well as the importance of job satisfaction for achieving high performance.

We may conclude that motivation and job satisfaction to some extent affect the performance of university researchers, and hence the research and teaching performance of universities and other higher education institutes. The quality of both the scientific results and the student training would therefore appear to a certain extent to depend on the motivation and job satisfaction of university researchers. However, during the COVID-19 pandemic, the working conditions, the daily routine, and other important elements of the university researchers' working system underwent major changes (Joshi et al., 2020).

So how does the pandemic affect the motivation and job satisfaction of university researchers, which are significant factors of university performance? In this study, we will try to answer this question using the case of two well-known French universities.

## **Literature Review**

In general, motivation is the process that initiates, guides, and maintains goal-oriented behaviours (Cherry, 2022). In other words, motivation is the study of why individuals behave as they do: what gets their behaviour started, and what directs, energizes, sustains, and eventually terminates action (Graham & Weiner, 2012). At work and especially in the case of management, motivation plays a critical role because, in the form of distributing energy to different actions, motivation is the only aspect of behaviour that people can control. This means that any attempt to change behaviour must do so through a change in motivation (Kanfer et al., 2008). It is therefore very important for management to know what motivates employees and what affects their motivation.

Motivation theory has been around for over a century, during which it has evolved significantly. It began wizith Taylor's (1911) rational-economic model of the-maximization of employees' own financial and material rewards. Then there was Mayo's (1922) social model which focussed on the satisfaction of employees of employees' social needs. Later, a self-actualizing model, drawing on the theory that human needs are hierarchically organized, was put forward by Maslow (1954). In contrast to previously