

Addiction and work vulnerability in university professors

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Summary

The study analyzes some manifestations of work addiction that are present in university professors and that, in the first instance, manifest themselves, among others, in completing tasks that correspond to academic status, while adhering to the parameters of increasing professional development and service to his group of colleagues and students. Related to this form of addiction, a space of vulnerability is discovered that these teachers suffer from, as they become susceptible to the demands resulting from labor dependence on their peers and the work environment in general. These demands tend to increase, in a permanent cycle of assumption of new tasks, with what one feeds, together with addiction, a perennial state of dissatisfaction associated with stress and other health problems. The need to investigate the course and impact of the addictive phenomenon and its connection with occupational vulnerability is explained. To comply with the above, the research terms were defined that allowed the bibliographic search to be undertaken and the corresponding selection of sources for review and in a later stage the critical analysis of the literature was carried out. The convenience of investing in the advance and ongoing training of university professors is analyzed, and possible future perspectives of research on the phenomenon under study are presented.

Keywords: work addiction, university professors, professional development, job dependency, health problems

INTRODUCTION

Work addiction in higher education can be noticed in teachers who express the need to be constantly working, so that their well-being depends predominantly on the completion of the work, in this group there is the need not to have a feeling of tasks to be done.

On the basis of such behavior, an almost certain vulnerability occurs, since these teachers become very much in demand by other colleagues, for their students and for very diverse activities that usually appear in the work environment.

By distinguishing between work addiction and related occupational vulnerability, in the daily reality of the university, the need to investigate the existing theoretical contributions on the subject is justified, in order to reflect on what has been contributed and recommend the probable courses of future research.

The purpose of the study was to analyze manifestations of workaholism in university professors and their relationships with occupational vulnerability, by determining an initial terminology proposed to verify it in scientific publications.

Materials and methods

The methodology followed for the study includes listening to the contributors, who offered the terms to later search for the published materials that were later reviewed and, from said review, access the referential evidence that is presented as results.

Listening to the contributors, using a sample of 5 university professors who recommended the search terms and who belong to 5 universities, which correspond to the authors of the research and having expressed prior willingness to collaborate with the study. To obtain the initial data, through the contribution of the teachers, a convenience sampling was developed (Hernández González & Hernández González, 2021).

The suitability of the sample of contributors was established in the following criteria: willingness to collaborate, preference of the 5 professors for the debate on the subject investigated, working in different universities, more than 10 years in Higher Education, since this guarantees experience on the subject under investigation. In order to carry out the inquiry into addiction and occupational vulnerability in university professors, it became a procedure of qualitative value for the authors of the research to rely on contributors from their own center, as they could offer an enriching vision of such a complex topic.

The 5 contributing professors indicated the research terms to undertake a next stage of research in scientific publications and, for this, they had to answer the following question: What fifteen (15) terms should not be missing in a research on workaholism?

The definition of terms was extracted from the responses offered by the contributors, so there were two rounds of responses. From the first round, 73 terms were obtained, which were reduced by the authors of the research, due to the fact that repetitions were given either exactly or using synonyms. One of the contributors only suggested 13 terms.

A refined and reduced version of terms was reached to carry out the bibliographic search on the Internet; in the second round, the contributing professors were asked to rate the priority they gave to each of the final terms. These results are presented in (Annex 1). This annex served the authors to prioritize the priorities of the search for publications, according to the terms provided.

For this online search, the difference between addiction and work motivation is taken into account and that, in a similar direction, (Daumiller et al., 2020), They inquire about what exhaustive international research on teacher motivation should entail, a question that involves, unlike our research on addiction, a search for solutions on what could be done to expand the scope of that other line of research.

As a next step, the sample of publications was agreed, for which the following criteria were assumed: The works to be reviewed have been published, predominantly, in the last 5 years, be hosted in one of the following databases: PubMed, Google Scholar, Web of Science, Science Direct, or instead, correspond to an official site of international organizations.

Each of the authors proposed 10 papers, which were selected by coincidence, from a total of 50 publications initially proposed, finally reduced to 35. One of the 36 entries in the bibliography corresponds to an article of methodological value that does not deal with the subject. Each of the papers in the article sample was suggested at least once by the authors of the research.

For the critical analysis of the literature, an individual study of each proposed article was carried out, the authors noted the explicit or implicit presence of the terms initially contributed by the sample of professors.

The information collected was organized in a logical and coherent manner and the report was drafted.

ANALYSIS AND DISCUSSION OF RESULTS

Reaching addiction?

It is known that addiction is generally related to a pattern of compulsive and uncontrollable behavior towards a substance or activity, with negative consequences and an inability to stop said behavior. In this sense (*UNESCO: thesaurus "addiction"*, 2024), reserves the term to record a social problem and emphasizes alcoholism, smoking, and drug addiction in a spectrum related to the social and human sciences.

It might seem that the dependence on work in university professors, although it may share characteristics with an addiction, departs from the arguments that distinguish an addictive condition in the clinical sense of the expression. In this case, labor dependence refers to the tendency to depend excessively on work or colleagues, as the main source of satisfaction, personal identity and self-worth, and corresponds to the more general features expected for the addictive behavior that it postulates (Andreassen, 2013).

According to (Atroszko, 2022), Workaholism is strictly associated with stress on and off work and high work obligation, which are well-established risk factors for a number of diseases and disorders that constitute important components of the global burden of disease.

Also on these analyses (Yin et al., 2020), They stress that such a form of behavioral addiction can affect an individual's physical and mental health, as well as their personal relationships, by prioritizing work over other important areas of life.

Based on generalizations of previous research (Glicken & Robinson, 2013) They summarize that workaholics are socially inadequate in their home life and have difficulties in personal relationships, as well as that excessive work often prevents them from forming and maintaining intimate relationships with their spouses, while using work as a substitute for all other relationships.

Through the work of (French et al., 2020), Four distinct profiles were found that characterize teachers' time allocation, including a focus on research, a focus on balanced teaching, teaching, and service, and classical balanced research and teaching.

The researchers, in this case, note that profiles that emphasize teaching were associated with female academics and greater housework, compared to those that emphasize research.

For its part, (Guédon & Bernaud, 2015) They argue that for teachers addiction is experienced differently since it causes fewer harmful effects and is at a higher level than for other categories of staff, administrative and technical, therefore, the authors suggest that a higher level of workaholism should be expected among teachers and add a more important role of personality to explain workaholism. Because teachers have more flexible working conditions than other workers.

In any case, a distinction must be made between the behaviors that differ in relation to the dedication that requires a habitual practice of reflective teaching and academic optimism, as correlates of the work commitment of university teachers (Li et al., 2023).

In any case, the challenge of exhaustion and knowing how to manage people's relationships with their jobs emerges, so that health effects do not occur as a result of overloaded work practices for which the worker does not have the most appropriate conditions to be able to face them (Maslach & Leiter, 2022).

After having carried out the partial review of the agreed literature, the authors of the research agree that, depending on the type of involvement present in some university professors, the conditions may be present to trigger addictive work behavior.

Work before everything else

By generalizing previous studies (Glicken & Robinson, 2013), They recall that workaholism produces much higher levels of marital dissatisfaction and divorce rates and that lack of sensitivity to the feelings of others, that workaholics tend to be much more irritable in the work environment and in their personal lives than those who were not workaholics.

In this direction (Jackson et al., 2016), They found that workaholism was not strictly related to an addictive personality, on this basis they provide a new understanding of how personality can be associated with workaholism, for this they also discuss the managerial implications.

When (Atroszko, 2022), He argues that excessive dedication to work may be consistent with an addictive disorder, adding that this disorder is of epidemiological importance due to its high prevalence rates that range between approximately 7% and 20% depending on the country.

With the confirmation of the first hypothesis of (Guédon & Bernaud, 2015) It was corroborated that personality had notable links with workaholism, particularly with respect to neuroticism, this relationship confirmed by him in university professors, is equally illuminating in previous studies.

As part of the work of (French et al., 2020), Associations were also found between membership profile, gender, and time spent on household chores, childcare, and elder care. These authors used opposing theories (job enrichment, effort-reward imbalance model) to investigate profile associations with work-family balance, job satisfaction, affective commitment, and intentions to leave the profession. Four profiles are proposed as conclusions of this research: research approach, teaching approach, a "classical" dual approach to research and teaching, and a dual approach to teaching and service.

He also adds (Atroszko, 2022), that ineffective leadership of managers becomes a motive for workaholism and is a major source of workplace harm and suggests that treatments for other addictions such as obsessive-compulsive personality disorder can be adapted to workaholism, due to shared similarities.

It is important to distinguish, in this case, the movable boundaries that are established between motivation and addiction, for which the questioning of (Daumiller et al., 2020), As to why should we be concerned in the first place with the motivations of higher education professors, particularly with regard to studying them empirically? Moreover, if research on the motivation of higher education teachers is so important, why is it still underdeveloped?

Without having explained, still very well, the connections between the addictive phenomenon and motivation, in the university teaching environment, (Schmiedehaus et al., 2023), The alert about the increase in job resignations in the sector returns. This phenomenon has followed an upward trend, in this sense the key predictors for leaving academia are identified as low organizational support, high burnout and low compassion satisfaction. In such a case, it is understood that the Exodus of teachers affects compliance with public policies.

In such a case, it would be necessary to compare the amount of the resignations, of men and women, since they have already (French et al., 2020), They had indicated that women are more likely to belong to the teaching profile than to the research profile, and that the profile of a research teacher is associated with fewer hours of domestic work. In view of this, could a higher rate of resignation be expected among women?

In this sense, it should not be overlooked that the high rates of depression and anxiety behave more strongly among teachers who, in advance, express in some way the intention of leaving the academy (Schmiedehaus et al., 2023).

With the research of (French et al., 2020), if something was very well clarified, and that is that the members of the classic performance profile obtain the greatest balance between work, family and job satisfaction, while the members of the teacher profile are the lowest in each correlation.

On a balance between rewarding and enriching demands, the most positive results are produced, they also warned (French et al., 2020). It is not precisely the teachers who move in a merely teaching performance profile who show this balance.

On the other hand, however, it is not clear to what extent teachers who concentrate more on teaching than on other profiles express a possible addictive condition. It should be taken into account here the confirmation of the second hypothesis of (Guédon & Bernaud, 2015), which is based on the fact that beyond personality, working conditions and organizational context are correlated factors with workaholism.

In any case, there is an urgent need to implement prevention programs, including those aimed at young populations, to reduce the high prevalence of workaholism and reduce its harms (Atroszko, 2022), for this it is necessary to first resolve the lack of social and institutional recognition of addictive work disorder and the lack of adequate policies and strategies to counteract it.

Moving forward with concrete preventive proposals on occupational addiction, it is convenient to clarify the possible relationships of the phenomenon with the time of dedication contracted for the teacher, in this sense the results of (Jackson et al., 2016), They distinguish that the ways of approaching work are associated with enjoyment and the ways of avoidance generally collide with the feeling of motivation to work, but only in full-time workers.

Working conditions of this type, more generally, have been referred to by (Andreassen, 2013), when it states that work dependence and addiction have been conceptualized on the basis of fundamental differences, but it is important to point out that the first of them is evidencing symptoms and characteristics that correspond to convincingly addictive patterns, for its more comprehensive study it is important to take into account the conditions of the work context.

Here it is important to point out that not only external interventions could contribute to reducing the addictive phenomenon, it is necessary to insist on the teacher's learning to deal with his behavioral tendency. In this sense, perceived emotional intelligence promotes coexistence and personal well-being. Every teacher can improve this type of intelligence throughout life (Botey et al., 2020).

With the above, I would order the third hypothesis verified by (Guédon & Bernaud, 2015), which defends that workaholism is not an indicator of occupational health problems. In this regard, they add that workaholism has an adaptive component that can lead to dysfunctions in the social sphere but whose effects in the professional and medical field are not observable.

Against this and other associated behaviors (Maciel et al., 2023), determined the prevalence of mental disorders. They supported their results with sociodemographic, occupational, self-perceived interpersonal communication, and associated vocal symptoms.

As part of the actions to be integrated into a preventive context, what is proposed by (Guzmán, 2019), by indicating the convenience of undertaking health diagnoses, which allow the incidence of stress in teachers to be evaluated, and on this basis derive interventions that help improve the well-being and reduce the work tensions of these workers.

It should be noted that different manifestations of stress such as anxiety, anguish or emotional emptiness, are usually visible in teachers with workaholism, when they are not working, which reflects an emotional and psychological dependence on work that could be summarized as a feeling of emptiness.

This behavior is also associated with the system of values in which these university professors believe, when they contradict a desired state of health and necessary for the exercise of optimal teaching (Albu & Cojocariu, 2012).

The high moral values in which a university professor may believe, inexorably, leads them to be zealous fulfillers of their obligations, this, however, can be propitious to place them in contradictory situations between the fulfillment of duty and health care.

It is not surprising in such a case, the appearance of an inability to disconnect from work, even during periods of rest or vacation, which may indicate an unhealthy pattern of work dependence according to the general analyses that correspond to sectors broader than the higher education teacher, but whose effects on health apply perfectly to university professors and that was analyzed by (Maslach & Leiter, 2022).

Although workaholism has a behavioral expression, generally not associated with substance addiction, it can also have negative consequences in personal and professional life, it involves specific risks, especially for health, especially in the social sphere. It is important to address these behaviors and seek a balance between work and other areas of life to ensure holistic well-being (Kottmann et al., 2024).

In this flow of studies, there is a lack of works that analyze the relationships between work-addicted behaviors and intentions to leave academia, since it is not empirical or theoretically convincing to assume that a professor with this type of addiction carries an indicator of permanence in the sector.

Through the use of a comprehensive model of occupational health, to understand the factors associated with the intentions to definitively withdraw from academia, an idea present in some higher education professors (Schmiedehaus et al., 2023), They distinguished environmental factors, such as work-life conflict, poor organizational support, stress, and burnout. These findings can lead to specific interventions so that teachers' frustrations can be carefully attenuated and, therefore, reduce dropout and, in addition, change the unfavorable assurances that exist.

In any case, the obsession with work becomes inconvenient for health, to the point of sacrificing personal well-being, interpersonal relationships and free time in favor of work activities. Here again, it is pertinent to insist on the development of perceived emotional intelligence, as it promotes coexistence and well-being both for oneself, for the family, the institution where one works and especially for the student (Botey et al., 2020).

Once the authors of the research advanced in the review of the literature, it is agreed that workaholism carries attributes capable of causing damage to the health of the teacher, his own family, co-workers, and his students and entails economic costs. For all these reasons, it is necessary to address the phenomenon and refer interventions aimed at prevention.

Workaholic teachers who become "essential"

University professors who are considered "essential" for their work group, in addition to having a wide openness to collaboration, are up to date on the latest research and advances in their field, at the same time they are experienced in the specific management of areas of knowledge, which can be called an expert.

With the research of (van Dijk et al., 2020), To answer the question What makes a university professor an expert, six tasks were identified, summarized as: teaching and supporting learning, educational design, evaluation and feedback, educational leadership and management, educational scholarship and research, and professional development.

On this basis, expertise can also be seen in knowing appropriately how to interact with students, in understanding their narratives and guiding them towards an environment of group collaboration, since, at a time like the present, the transfer of knowledge and skills in an environment of cognitive and technological reciprocity is necessary.

On the latter (Yang, 2023), refers to the importance of knowing how to understand that students have different attitudes towards collaborative learning and different needs and objectives in group work.

By taking up the attributes that make a teacher expert, to facilitate learning, they are not usually restricted to the teaching process of their students, they are also usually evidenced in the relationships with their co-workers, this makes them be sought after by everyone, how they are accessible, there is no lack of those who need them. In addition, today there are technological conditions that help, in a lot, access to these academics, Social Networks and instant messaging services are an example, email is less and less used, but it is still a more official way.

About that (Ferreira, 2022), states that the academic world, for all these reasons, functions as a hyperactive hive mind that depends on spontaneous, thoughtless and unprogrammed digital conversations, as a collaboration format preferred by people, adds that this culture of work management makes it impossible to concentrate or manage attention.

In such a context, without a doubt, the conditions are created so that academics with a tendency to work addiction are also potentially vulnerable to a specific type of dissatisfaction and overwhelm, precisely resulting from the excessive amount of collaboration that their managers and colleagues, students or when they come from other unsuspected directions.

The teachers in question show passion for teaching and are committed to the learning of their students, they look for innovative ways to transmit knowledge, to motivate their students, however, behaviors tending to the extreme, concomitant with the prevalence of common mental disorders and not infrequently, with affectations resulting from the misuse of the voice. About that (Maciel et al., 2023), have referred to the convenience of anticipating prevention measures in both directions, that is, both mental and vocal self-care.

Educational innovation for this concept brings diverse contributions to the health of the teacher, while it can work in favor of the economy of physical, mental and vocal efforts; Innovation helps to manage self-learning

and students who learn under this type of teaching, with a growth mindset, are more successful and participative in the educational process (Sahagun et al., 2021).

Assuming and working on innovation entails changes; (Kottmann et al., 2024), They demonstrated that educational innovations, which may require a change in teaching practice and in teachers' core beliefs or values, can cause considerable uncertainty.

Overcoming uncertainty in the face of change becomes an imponderable, it is necessary here to find an optimal approach to motivate teachers to adopt innovation on an individual scale, since initiatives implemented on a large scale can require an excessive amount of time and resources (Sidhu & Gage, 2021).

Beyond the contributions to the health of teachers who are addicted to work, as a result of educational innovation, it is urgent to train them in emotional intelligence.

Continuing with a suitable preparation in perceived emotional intelligence, connected to specific aspects of teaching performance, could be very helpful in learning to sustain healthier relationships with work and with people (Botey et al., 2020), even safeguarding the commitment to academic excellence, but reevaluating the beliefs of self-efficacy.

With the study of (Yin et al., 2020), herself revealed significant differences in the relationships between Perceived stress and self-efficacy beliefs in professors from different higher education institutions. A greater stress load can favor the belief that the teacher is being less effective, that is, a behavior of self-incrimination, even when the presence of external factors, not attributable to the teacher, may affect the teacher's effectiveness.

The addicted teacher is almost never satisfied with his own performance, everything seems insufficient and he strives, more and more, to do his job better, a real blessing for the administrations to be able to have a professional with such attributes of empathy and availability.

Although a significant part of addicted teachers are usually accessible to their co-workers and to their students, the "essentials", others are more concerned about their academic performance and are not willing to provide support and guidance at any time of the day, therefore, they protect their performance spaces and excel more in areas such as scientific production than in the service of open, participatory and reflective teaching.

According to (Li et al., 2023), The exercise of reflective teaching goes hand in hand with the academic optimism and work commitment of university professors, this concomitates with performance in an environment of collaboration and teamwork, for which appropriate levels of empathy are also required.

Specifically (Jaber et al., 2018), They have referred to epistemic empathy as the act of understanding and appreciating someone's cognitive and emotional experience within an epistemic activity, that is, an activity aimed at the construction, communication and critique of knowledge that leads them to be good collaborators, working as a team, and building knowledge together with other teachers and students.

Based on the above, it is to be assumed that the second subgroup of teachers who are workaholics, but who are more focused on research, often suffer from difficulties in achieving their empathic insertion in groups of colleagues or students.

The authors of the research, in assessing the information obtained so far, agree that teachers who become "indispensable" are vulnerable to facing excessive work, since they have the necessary expertise for their group and open communication, which facilitates the increasing assignment of tasks, both by the administration and by their colleagues.

In them, it is easier to identify in the first group of addicted professors, probable candidates who can serve as facilitators in learning activities that are unavoidable for survival in higher education, such as ICT knowledge.

The inescapable mastery of ICT

Consistent with the above (Sailer et al., 2021), identify different forms of initiation and advancement in learning related to the use of ICTs, on the part of university professors, but in any case the timely transfer of knowledge and skills in appropriate collaborative environments has been fundamental for them, together with other institutional factors.

Preparation in Information and Communication Technologies (ICT) can have a significant impact on the technological independence of university professors and on the level of empathy they manage to develop with their students, knowing that most of the teachers successful in the use of digital technology undertook their learning alone (Jorgensen et al., 2018).

One of the main motivations for learning, using and helping colleagues to learn technology is precisely to promote their independence to solve simple technical problems or even to use educational software, all of which results in better insertion in an increasingly demanding and uncertain work environment (Antonopoulou et al., 2023).

Related to the above, the lack of skills in the creation of digital educational materials can make teachers depend on their colleagues for the development of multimedia content, interactive presentations or other online resources to enrich their classes, since the lack of basic skills in this field becomes a barrier to the use of these technologies in education (Sailer et al., 2021).

The acquisition of digital skills can promote independence in carrying out administrative tasks on digital platforms, such as grade management, the organisation of materials or institutional communication (Lohr et al., 2021).

Based on these assumptions, there is no doubt that an expert university professor will become more and more expert every day with the use of digital technology. To this effect (van Dijk et al., 2020), recognize the presence of digital competence in expertise, therefore it is essential for achieving better performance in tasks and to carry out a wider variety of tasks.

In addition to this, it has been found that university professors by improving the use of digital tools, simultaneously improve online communication and collaboration, this can positively influence their interaction with students and colleagues through virtual platforms, as a result, professors find a very adaptive way to stay afloat in the midst of extreme uncertainty (Antonopoulou et al., 2023).

The dependence on other colleagues to be able to carry out one's own work may be related, not only to technological and professional incompetence in general, it is also caused by policies that focus on the extreme solution of university problems, by estimating the expert professor as a manager of the institution's income, rather than on the stimulation of performance and individual improvement that should precede the solution itself. This is in accordance with the rationale provided by (Kottmann et al., 2024), on the determinants of the innovative behavior of teachers in higher education.

This means that the important thing is to solve the problem and the cumulative consequences that this entails do not matter, without repairing the distorting result that this may bring to the professional development of teachers who are less enthusiastic about self-improvement and without taking into account an axiological perspective, or an explicit consideration of the values in which university professors believe (Albu & Cojocariu, 2012).

An altruistic conviction to help others also means subtracting hours from one's own time, in the already contradictory landscape cohabited by insufficient working conditions and demanding work. Not far from it (Caraballo, 2019), It determines the most important tendencies of the meaning of the profession, as it has an ambivalent attribute, at one extreme the most positive is distinguished, such as satisfaction, continuous learning, however, at the other extreme the negative can be appreciated such as: inconvenient working conditions, excessive fragmentation and inadequate relationships, among others.

In such a context, some teachers who are addicted to work become very vulnerable to this type of deformations in the academic field, in which case labor abuse can appear both on the part of the administration and their colleagues: taking advantage of the disposition to assign them an excessive workload that in the end, does not lead to adequate recognition or compensation. The additional effort in such a case accentuates the possibility of inducing health effects (Maciel et al., 2023).

In any case, this type of labor abuse can manifest itself in various ways, such as constantly assigning additional tasks, not respecting work time limits, not valuing the work done, spending too much time helping others to the detriment of one's own occupations, among other harmful behaviors.

Therefore, it is important that university professors are aware of their possibilities and learn to establish healthy limits to protect their well-being and avoid burnout, in any case, here it is also appropriate to identify and induce the opportunities offered by perceived emotional intelligence (IEP) (Botey et al., 2020).

It would also be appropriate to refer again to the study carried out by (Guzmán, 2019), who corroborates once again, the existence of sources of stress for university professors that converge in factors related to this type of work saturation, little time to rest, interpersonal conflicts and low salaries.

All this makes it essential to promote a respectful and collaborative work environment, where everyone's work is recognized and valued in an impartial manner, an aspect that is in accordance with the observance of an initial training that is equally equitable, humanistic and therefore respectful of the other (Jaber et al., 2018). Focused on the selection and training of future professors of Higher Education, who must be bearers of growing attributes of emotional education, indispensable to mitigate such risks, it is therefore advisable to take into account what has been studied by (Chigbu & Nekhwevha, 2022), who concluded that the preparation of students varies greatly, among the graduates of the different faculties and that this also decreases hiring opportunities.

If the university is nourished, to complete its own workforce, by its own graduates, then it is justified to observe rigor both in the preparation and in the selection of candidates who aspire to work in it, to incorporate professionals committed to constant learning and the search for excellence.

It would be appropriate to emphasize at this point that (Diery et al., 2021), They insist that university teacher trainers are seen as central agents in supporting evidence-based practice among future teachers. It is up to them to entrust, in the first instance, the training of future teachers oriented to excellence.

The authors of the research agree that the progressive and independent use of ICTs is contributory to the expertise of university professors, therefore, it is necessary to invest in their domain, as part of the anticipated and permanent training that guarantees the equitable performance of the faculty.

Investing in early and continuing education

Adopting appropriate decisions in the process of early and permanent investment in the future professors of the university, leads to consider that they come from diverse sources, the university does not complete its faculty only with its graduates, however, many of these institutions, in this way, get the largest number of professors, in any case, the investment process involves scientific and methodological accompaniment through efficient tutorials.

These tutorials must be maintained, at least, during the first three years of starting to work at the university, they mean, among others, training novice teachers with internal policies: social studies, science, technology, particularly artificial intelligence and a foreign language, since all this knowledge is part of an integral culture for work at this level of education.

In these analyses, what is stated by (Chigbu & Nekhwevha, 2022) that universities and their faculties must reimagine themselves as the main drivers of skills development and expand the channels for future graduates to contribute to the satisfaction of their needs. Added to these considerations are the teachers' beliefs of self-efficacy.

In this direction (Noben et al., 2021), Exploring how the impact of a professional development program, for university professors, affects their self-efficacy beliefs and teaching conceptions, these authors found that the program led to a significant overall increase in self-efficacy beliefs reported. The considerations resulting from this study, in their entirety, must be taken into account as part of the anticipated and permanent investment that should be undertaken for Higher Education professors.

It is also advisable in the field of these investments to take into account the assumptions of evidence-based teacher training (Diery et al., 2021) This entails addressing the gap between research and teaching, as well as promoting its closer alignment with practice.

In addition to this purpose, it is convenient to outline the investment process, focusing the monitoring on the development of the quality of teacher training, however, there are new contributions on how research is and should be linked to the competence of teacher educators (Caspersen & Smeby, 2023). Teacher trainers have a high responsibility for the continuous preparation of university teachers and must therefore be taken into account in the proposed investment process.

For this investment, arguments based on in *Resources and commitments*, meanwhile, such a dilemma offers different predictive possibilities in the well-known interaction that occurs between motivations and decision-making, the results of (Silva et al., 2023), are of great value because they show how the *cognitive proximity* between academics and researchers, can induce favorable solutions in decision-making.

In this case, the adoption of emerging alternatives related to the various factors that spread concerns about justice, responsibility, and the lack of knowledge about artificial intelligence at the time of being assumed in Higher Education, as well as about the resources that are required to involve it in teaching practices, stands out in a very particular way (McGrath et al., 2023).

It is known that, thanks to advances in artificial intelligence, many organizations, including university organizations, find a promising path for their restructuring and progress at currently critical moments in their performance.

Choosing an appropriate teaching pedagogy for the assumption of artificial intelligence is an important step that universities must take, to enter the inevitable path that, sooner rather than later, must be taken and from which the members of their faculty cannot distance themselves.

There have been contributions regarding the adoption of appropriate pedagogies to implement complex and challenging processes such as the one referred to above, however, approaching them according to a growth mindset that is the basis for the way to develop positive beliefs about one's own abilities is particularly appropriate (Sahagun et al., 2021).

Equally convenient are the forecasts of (Sidhu & Gage, 2021), by providing a detailed analysis of assumptions about the conditions needed to implement organizational change in the university context, while also suggesting an approach that reinforces and sustain the adoption of teacher innovation in the long term.

The results of (Leitão et al., 2023), must be taken into account in this horizon, even when they focus on clarifying, in particular, the deep digitalization of Hybrid Civic Universities, since, by reviewing the traditional tripartite mission of higher education institutions, a path is founded for advances in digitalization, science and open innovation.

Greater clarification on the issue of the adoption of artificial intelligence by universities, which should be taken into account as a component of an eventual investment process in the early and permanent training of teachers, contribute (McGrath et al., 2023), by identifying differences related to accountability, fairness, and knowledge about artificial intelligence.

These authors found that professors are more inclined to believe that universities should use artificial intelligence tools and systems to achieve equitable results. The development of solutions through artificial intelligence is a way to reduce labor vulnerability, as it is possible to reduce physical and mental effort, as well as the time needed to solve pedagogical and institutional problems.

At this point, the authors of this research agree that it is necessary to be attentive to the directions dictated by the demands for investment in initial and permanent training of university teachers; This investment can result in teaching them to work in a healthy way and, therefore, becomes a resource to guarantee the sustainability of the investment in the permanence and performance of the teaching staff. To this end, it is advisable to monitor the possible courses of research on occupational addiction, which should be taken into account as an aspect of specific prevention in these investments.

Possible Directions of Research on Work Addiction in Higher Education Institutions

At the conclusion of this contributing-referential research on Addiction and Occupational Vulnerability in University Professors, new perspectives are opened for the deepening of several unfinished topics. One of them is, without a doubt, the treatment of teachers' conceptions of self-efficacy (Noben et al., 2021). The authors themselves propose a clarification of the way in which development programs affect the professional learning of teachers.

Related to the above, the inquiry into the attitudes of teacher trainers is justified, it is assumed that such attitudes have changed towards a more positive approach to research, that these changes are related to a more experienced research staff, therefore, future research should study, in more detail, the concept of teacher/researcher identity, to further explore these relationships. (Caspersen & Smeby, 2023).

Added in this space is the prospect of investigating how universities could offer personalized training, rewards, and support structures based on the types of interaction between motivational and decision-making approaches (Silva et al., 2023). In this framework, future quantitative studies could monitor the influence of professional development on the situation of individual resources, as well as carry out a detailed analysis of the psychology of academics who interact with companies.

After this, there is room for review regarding how the taxonomy based on the Theory of Open Innovation adds to the limited knowledge of the role played by digital advances. These strengthen the knowledge absorption capacity of universities whose aim is to have a triple impact on society, including levels of economic, environmental and social change (Leitão et al., 2023).

It is justified to address the problems that the creation of fictional characters entails through the use of the Q methodology, aimed at the implementation of collaborative learning, meanwhile, requires both quantitative and qualitative analytical skills (Yang, 2023). These authors even indicate that instructional designers who want to investigate subjectivity in their daily practice must assume the complexities of this methodology, which in no way detracts from its promising opportunities.

On the other hand, inequality in teaching performance, as a result of the dependence of some teachers on others, can generate a gap in teaching performance within the institution, which can affect cohesion and teamwork among academic staff, a large amount of information induces a lack of attention because it is not enough to produce and transmit information; You should also know how much it costs, in terms of poor care (Ferreira, 2022).

In this analytical and focused flow to project future research, it is necessary to take into account what has been pointed out by (Glicken & Robinson, 2013), when they point out that the term workaholic is often vague and may not be used correctly.

By way of closing, the authors consider that the future paths of research on occupational addiction in Higher Education Institutions become somewhat predictable, taking into account the growing manifestation and recognition of the phenomenon. However, it is urgent to add the convenience of directing research to the

search for health prevention alternatives for work and the creation of equitable work environments without work overload.

Limitations of the study: Taking into account that the convenience sampling adopted for the research allows the researchers to choose the participants circumstantially, results may have been influenced by the selection of terms that served for the selection of the materials used in the bibliographic review, so it is convenient for new research to adopt other selection criteria.

Conclusions

The methodology followed for the study satisfied the fulfillment of the proposed objective, it was articulated from the listening of contributors, through which the terms were obtained to later develop the search of articles that were reviewed and from this review the set of referential arguments was obtained.

There is disagreement regarding the use of the term work-related addiction, ranging from authors who openly deny the phenomenon, or underestimate its implications, to others who argue its definitive existence and demonstrate its burden of morbidity.

Workaholism can have negative consequences on the health of the teacher, his family, his colleagues and his students, as well as generate economic costs. It is crucial to address this phenomenon and take preventive measures to mitigate its effects.

Through the research, two fundamental forms of addiction to university work were identified, one focused on work and cooperation and the other focused on professional self-realization. The first of them connects with the risks of vulnerability due to the assignment of teaching overload and other forms of labor abuse.

The growing and independent use of Information and Communication Technologies (ICT), while improving the competence of university professors, exerts liberating contributions from mental and physical effort. Therefore, it is essential to invest in training for the use of these tools, as part of their continuous training and to be able to ensure equitable performance in the faculty and promote healthy labor relations.

It is imperative to pay attention to the initial and continuing education needs of university teaching staff, as this can help them work healthier and ensure the sustainability of the investment in their development and performance.

It is urgent to research and develop occupational health prevention strategies and create equitable work environments that avoid the work overload of university professors, taking into account the costly incidence of the exodus for the fulfillment of public policies.

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Annex. 1. Result of the sampling with Higher Education professors

NO.	Term provided by teachers once reduced	Priority given by teachers, where (1) equals no priority and (5) equals highest priority				
		P.1	P	P.3	P.4	P.5
1.	Abandonment of the profession	3	1	3	4	2
2.	Labor abuse	2	5	4	4	3
3.	Scientific Update	5	1	5	1	5
4.	Job adaptation	5	5	3	3	1
5.	Exhaustion	3	1	2	4	4
6.	Respectful work environment	3	1	5	4	1
7.	Organizational Support	5	5	5	1	1
8.	Collaborative learning	2	1	5	4	5
9.	Learning Technology	4	1	3	3	1
10.	Area of expertise	5	2	4	3	3
11.	Low wages	5	3	3	5	5
12.	Lack of resources	2	2	4	2	2
13.	Workload	4	2	5	2	1
14.	Digital skills	2	1	1	1	1
15.	Interpersonal Communication	5	2	2	2	5
16.	Working conditions	3	1	3	4	1
17.	Digital conversations	3	2	3	3	1
18.	Belief in self-efficacy	3	1	1	1	1
19.	Harmful effects of work	4	1	4	4	5
20.	Workplace empathy	2	1	3	5	3

21.	Reflective Teaching	2	1	5	1	3
22.	Set limits	2	3	1	3	3
23.	Work stress	1	5	4	1	2
24.	Evaluation of teaching performance	1	5	5	3	5
25.	Environmental factors	5	2	5	2	5
26.	Source of Workplace Injury	5	3	3	3	3
27.	Epidemiological significance	4	3	5	4	3
28.	Educational innovation	4	2	2	4	3
29.	Financial Insufficiency	5	4	3	3	1
30.	Artificial intelligence	4	2	2	4	5
31.	Emotional intelligence	4	2	5	1	4
32.	Irritability at work	2	3	1	4	1
33.	Misuse of the voice	1	1	1	3	4
34.	Teaching methodology	5	3	3	1	3
35.	Morbidity	3	4	4	5	1
36.	Work motivation	2	3	4	3	1
37.	Neuroticism	2	2	2	3	5
38.	Role of personality	5	2	2	2	4
39.	Essential teachers	4	3	4	5	2
40.	Teachers who are employed	4	4	5	1	3
41.	Social Relationships	2	1	4	1	3
42.	Resignations from employment	1	1	2	4	3
43.	Health risks	1	5	4	2	4
44.	Job satisfaction	4	3	2	5	4
45.	Work saturation	3	4	1	1	5
46.	Free time	4	1	1	1	2
47.	Knowledge transfer	1	4	1	3	3
48.	Psychological disorders	1	2	2	2	4
49.	Tutors or teacher trainers	4	3	2	1	1
50.	Professional values	2	4	3	1	2