



Research Article

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Received: 8 January 2023 / Accepted: 28 February 2023 / Published: 5 March 2023

## Academic Directors Facing Internet Addictions, Learning and Health Promotion

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DOI: <https://doi.org/10.36941/jesr-2023-0032>

### Abstract

*The result that is presented is expressed from a bibliographic review of works published during the last two years 2020-2022 and, through which it was possible to verify the relationships that are established between the work of the Academic Directors, before the latent challenge and visible that is the crossroads of Internet addictions, by university students, increased in the stage already overcome of social isolation imposed by Covid 19 but, with emphasis on the achievement of learning at this high educational level, its risks and consequent decreases in the attacks that occur as a result of procrastination. All associated with the addictive phenomenon, in a projection of health promotion that the current, humanistic, modern and developing university should not give up in any way, being precisely in this direction an unavoidable pillar of social development, which lies precisely in the high professional qualification. of the new generations committed to a prosperous and sustainable social change.*

**Keywords:** Academic directors, Internet addictions, learning, health promotion, university students

## 1. Introduction

Currently, universities aim to produce, disseminate knowledge and provide alternative solutions to the needs presented by students and society (Ali, 2021), as in the contribution to health promotion and intervention (Dietz et al., 2020).

During the pandemic, people's mental health has been affected, such as an increase in depression and addictions (Dogon-Sander et al., 2021; Roberts et al. 2021; Saavedra-López et al., 2022). Faced with this situation, universities have organized themselves at the management level, health units, human resources and students to plan and address the problems that have arisen during the pandemic (Sahu, 2020).

Academic managers today find themselves at a truly complex crossroads, which manifests itself in the intertwining of learning, Internet addictions and the demands related to health promotion. In order to advance towards an effective understanding of the addictive problem, it is necessary to go into the most current theoretical positions, which reveal a course of connections between the stay in the educational institution and the performance of educational duties in a healthy way and, together with this, the use of a methodology that allows to properly examine the problem in its different interconnections and implications.

In the present study, a bibliographic review of publications dealing with the subject, which were predominantly published throughout the year 2022, is carried out, with current relevance and in accordance with the different lines of explanatory approach that are assumed in these publications. The research on the relationship between these concepts is justified, since there is a tendency to an increase in the unhealthy consequences of addictions and the relative lack of institutional effectiveness to address the phenomenon in a programmatic manner.

In this regard, several researches have been conducted on college students, such as the one proposed by Lebni et al. (2020) who conclude that excessive internet use by college students leads to the development of mental health problems such as anxiety and depression and also affects academic performance. Likewise, Foroughi (2020) found that Instagram addiction negatively influences academic performance and life satisfaction and increases social anxiety and depression.

Obredor-Baldovino et al. (2022) also made an equally contributing analysis by evaluating different factors of a socioeconomic, demographic, socioaffective and academic nature to determine their influence on social network addiction in engineering students. The authors indicate that most students spend many hours on social networks, affecting academic aspects, work performance, interpersonal relationships, among others that, as is known, can have an undesirable impact on their health. Likewise, Yang (2019) considers that the development of health-related behaviors can contribute to the reduction of depressive symptoms; students with depression are more prone to generate internet addiction and problems in their daily lives.

That is why Pouresmaeil (2019) suggests that in the university setting, planned interventions linked to health promotion should be developed (Pouresmaeil, 2019). Therefore, it is important to investigate in this regard in order to establish public policies to reduce the psychological and psychiatric problems that will continue to appear during and after the pandemic (Hernández et al., 2021).

Therefore, it is essential to investigate the addictive phenomenon and its consequences on the student's health, to this effect, it is urgent at first the inquiry, in order to facilitate progress towards proposals for coping. The objective of the research consisted in explaining the challenge faced by academic managers in Higher Education educational institutions in the face of Internet addictions, learning and health promotion, based on a bibliographic review of works published in the last two years.

## 2. Development

### 2.1 *The addictive problem What does current theory say?*

The profiles of network addiction by university students show differences with respect to procrastination and academic performance according to (Suárez-Perdomo et al., 2022).

It should be noted that procrastination is a term of growing use, it is understood as the postponement of the obligations that correspond, in this case to the student, but can affect all subjects in the most different areas of work and social performance. A simpler understanding of the term, is what is said to leave things for later and instead occupy the time in more pleasant activities of little relevance.

The mediating effect of procrastination, has been studied by Pekpazar et al. (2021) in accordance with the scope of the most visible addictions during the use of the social network Instagram and its consequent effect on the academic performance of university students.

Regarding the use of the Facebook Social Network Rajesh & Rangaiah (2022) point out that personality traits are important factors in determining user behaviors; in this regard they indicate that friendliness, openness to experience and conscientiousness were negatively related to Facebook addiction, while loneliness, narcissism, impulsivity and shyness were significantly correlated with Facebook addiction.

In this line of analysis Elphinston et al. (2022) from a study conducted with university students point out that existing self-report measures of Facebook addiction are limited by the robust application of addiction theory, in light of this they managed to validate a new measure of Facebook addiction that overcomes previous theoretical shortcomings, while providing a scale for clinical and research applications with psychometric properties.

Faced with a scenario that has become a true global pandemic, university academic directors have placed themselves at a challenging crossroads in which addictions compete with learning, given the always unavoidable educational demand for health promotion, to which university institutions are committed.

Combating digital addiction requires the adoption of current approaches to distinguish future directions in a realm of effectiveness and certainties, he has suggested (Cemiloglu et al., 2022).

Although addictions, in the first instance and given their procrastinating effect, represent an inconvenience for achieving quality learning, their significance can be much more transcendent if we take into account their repercussions on the health of students, youth in the broadest sense, and society in general.

The convenience of turning to more systematized studies on the subject is evident at present; in this direction new contributions appear every day; however, in order to achieve a more comprehensive understanding of the phenomenon, it is advisable to examine its interconnection with the reality provided by the data in the course of the teaching-learning process in a more preventive rather than interventionist direction.

Regarding clinical interventions for patients suffering from problematic Internet use, Roberts et al. (2022) state that the most widely used and successful treatment is Cognitive Behavioral Therapy, although other psychological therapies such as reality therapy and family therapy, as well as pharmacological interventions, have also shown preliminary success in reducing indicators of problematic use.

In any case, prevention actions could contribute to determine a route of mobilization of at-risk subjects with institutional support, from the early adoption of a proactive behavior and the availability of empirical data from teachers and students that become initial inputs for the conformation of institutional programs aimed at health promotion in this area.

In this regard, the model proposed by Simanca H. et al. (2020) is relevant, and its result could be useful for the empirical determination of the processes related to the topic at hand, since it allows the collection and analysis of data from teachers and students supported by Academic Analytics.

It should be added that Academic Analytics is an application of business intelligence (BI) tools and strategies to guide decision making in educational institutions.

Decision-making in schools is also subject to the profound implications of pedagogical practices that predict the perceived learning of social skills among university students (Virtanen & Tynjälä, 2022). It is therefore advisable for a more comprehensive study to have sufficient correlational information beforehand.

It cannot be unknown that the association of internet addiction with depression, anxiety, stress and sleep quality is becoming more and more indisputable every day, in this regard Stanković & Nešić (2022) undertook a study to determine a mediation analysis approach in students.

Relatedly, student self-actualization problems are found to reveal associations between well-being related to the educational institution they attend, achievement goals, and academic performance even at the educational levels preceding college (Holzer et al., 2022).

The study on Internet addiction in young adults, which has been the subject of study through a meta-analysis and a systematic review (Lozano-Blasco et al., 2022), comes to mind in the framework of these analyses, and these results provide very conclusive data that impose the need to rethink the way of analyzing the problem.

The internalities at work in the addiction network are particularly complex and consequently, to be unraveled, require a network analysis approach (Zarate et al., 2022).

An analytical horizon of such complexities, makes addictive behaviors among college students deserve more particularized attention, in light of the acuity they have gained during the COVID-19 pandemic (Ting & Essau, 2021).

From such a situation and given the unstoppable supply of smart devices that are now available to society, none has aroused greater hedonic use and delivered a greater burden of stress and satisfaction than smartphones, in the face of this reality (Vujić & Szabo, 2022) have delved into the predictors of addiction.

Marciano et al. (2022) have focused their study on the relationship between neuroticism and Internet addiction and question the implications that could follow from a systematic conceptual review.

It is not an objective view to ignore the positive side of social networks that facilitate social progress, as they constitute a source of distraction in personal, academic and professional tasks (Suárez-Perdomo et al., 2022).

However, as opposed to a positive function of social networks, one cannot miss the one that contrasts and lets it be seen that with the increasing use of these, such issue is closely related to the advent of a widespread problem that affects the well-being and performance of university students (Pekpazar et al., 2021).

In recent years, the notion of digital addiction has become popular, in the face of this complex issue, requests for solutions, especially in adolescents, are on the rise (Cemiloglu et al., 2022).

In this regard, it can be stated that the effects on learning are particularly relevant and, from an area distant from these implications, it happens that the need to determine empirical trends and behaviors is in line with the worsening of the problems in a path of particular and anecdotal conflicts.

It is reiterated that Academic Analytics allows an analysis of data that are very important for decision making in the educational institutional environment, aggregating valuable information in the academic research activity and providing easy-to-use business intelligence tools (Simanca H. et al., 2020).

Virtanen & Tynjälä's (2022) study made it possible to examine the types of pedagogical practices that, predict perceived learning of social skills of university students in classes, where such skills are not stated as learning outcomes.

The affectations that occur today in people's health, are particularly related to the disproportionate access to social networks and the exponential growth of the Internet, such growth despite the functional use in human communication and useful impact on the technological development of society, has shown some disadvantages in recent years (Stanković & Nešić, 2022).

In this area of progressive emotional vulnerability, it is urgent to improve health promotion care for students, so that academic results can also be better supported by such interventions (Holzer et al., 2022). In addition, students are precisely the most promising treasure of society; they hold the most valuable potential capable of building a better future, based precisely on their potential for increasing, updated and renewed qualification.

However, the expansion of the networks, of the Internet as a whole, has been so disproportionate and rapid that it has barely been enough time to become globally aware of the risks arising from social addiction to the Internet, suffice it to say that it is still not recognized by the World Health Organization, even though it is unquestionable that it is a serious and problematic pathology (Lozano-Blasco et al., 2022).

As addiction functions according to its highly expansive quality, it does not cease to influence and increase its impact on other spheres of behavior, therefore, its comorbid consequences are increasing, as well as the transition and replacement of one form of addiction by another that could be increasingly compromising for health (Zarate et al., 2022).

Of course, in circumstances as particular as those that characterized the last two years, preventive measures to curb the spread of COVID-19 have affected university students in an unprecedented way (Ting & Essau, 2021). It is known that the states of social isolation ended up favoring the use of networks and this led to various health problems that are still being evaluated today.

The hedonic use of smartphones (entertainment, social networks, games) is particularly related to perceived life stress and life satisfaction, thus denoting an addictive tendency (Vujić & Szabo, 2022). Here it can be added that, such behaviors even not infrequently, bid to manifest themselves in classes.

While it is true that unequal behaviors resulting from hedonic cell phone use may be associated with different factors, the potential of the behavior to endanger health is evident, however, Marciano et al., 2022 insist that not all users experience the same degree of vulnerability. In particular, these authors highlight that the personality trait of neuroticism has been shown to be a risk factor for Internet addiction (IA).

Although Internet addiction (IA) in the university context, even though it is predominantly focused on learning, it also provides ideal conditions for interpersonal relationships and contexts that can facilitate academic procrastination behaviors and impair learning performance (Suárez-Perdomo et al., 2022).

It would be necessary to determine in these analyses, if all social networks provide the same addictive potential, in this regard (Pekpazar et al., 2021) highlight that Instagram is one of the most popular platforms among young people and has specific characteristics that lead to problematic and addictive use.

Amidst the growing debate about internet addiction as a confirmed predisposing and diagnosable mental health condition; alerts are also growing regarding the need for prevention and intervention that encourage people to have more control over digital use (Cemiloglu et al., 2022).

Given the need for multidisciplinary efforts to mitigate possible pre-existing addictive behaviors, which, as indicated a moment ago, have been reinforced during the COVID-19 pandemic, it is not unwise to be alert to the advent of similar conditions of isolation that may result from future pandemics and natural disasters (Ting & Essau, 2021). Any social isolation is conducive to reinforcing digital addiction.

According to (Virtanen & Tynjälä, 2022) students' social skills learning is explained by pedagogical factors related to 1) the modes of teaching and learning, 2) the characteristics of the constructivist learning environment, 3) the characteristics of integrative pedagogy, and 4) the circumstances related to the atmosphere of the learning environments involved in their studies.

Such a set of pedagogical factors reserve integrated functionality against the risks of developing Internet addiction and depression, depending on the type of career that young people are studying and, knowing in advance that the choice of these studies is related to the type of personality that

characterizes them.

Some academic groups, such as medical students, have been shown to be at high risk for developing Internet addiction and depression (Stanković & Nešić, 2022). However, little is known whether the association between AI and depression is bidirectional or unidirectional, and to what extent the AI-depression relationship is mediated by anxiety, stress, and sleep quality.

The problems of dreams and the set of aspects that characterize good mental health are influenced by the early identification of the risks that lurk in the university environment, an important situation for academic managers at the crossroads of addictions, learning and health promotion.

In the Holzer et al. (2022) study, the relationships between school well-being, achievement goals, and academic performance were investigated by applying multidimensional measures to examine the relationships between subfacets.

Regarding collaborative learning, Virtanen & Tynjälä (2022) have insisted that such practice takes place in a constructivist environment and plays a fundamental role in the learning process; this way of learning is potentially related to the avoidance of mental health affectations that are generated from Internet addictions in a potentially preventive direction.

On mental health affects in alignment with internet addictions Stanković & Nešić (2022) provided strong evidence that addiction predicts depression and vice versa, thereby clarifying a bidirectional pathway, they also point out that the association between internet addiction and depression behaves partially mediated by anxiety and stress, the depression-internet addiction pathway did not result in the work of these authors mediated by mediators.

In general, the literature insists that the issue of student welfare, as an object of institutional attention, requires multiple and sustained interventions, elements of value, however, it is feasible to obtain in research that precedes even the student's entry into the university. The academic directors here play a proactive role through the use of a comprehensive diagnosis of each student and by taking into account their eventual vulnerabilities.

Along these lines the study by Holzer et al. (2022) contributes to differentiate the evidence on the constructs investigated and supports the approach to apply multidimensional measures for both well-being and achievement goals of students throughout their performance.

More specifically, Pekpazar et al. (2021) distinguish that the relationship between Instagram addiction and academic performance is mediated by procrastination. Initially, it could be suggested to consider the personality traits that are known to be determinant in the configuration of the attitude towards networks and the Internet in general.

These traits, in a related way, could have been integrated into the set of factors that influence teaching performance and that, at the time, were not the object of attention in the study of (Suárez-Perdomo et al., 2022) and this in the face of the traditional or individual learning modalities that are adopted by the students themselves.

## 2.2 *The methodological question How to examine the problem?*

It is appropriate to ask whether, in the midst of these more likely than threatening circumstances, the mode of data collection and management suggested by (Simanca et al., 2020) would be appropriate. In this case, it would be necessary to corroborate whether the proposal could work as a valid way to obtain and use empirical data that would allow progress in the interrelated studies of addictions, learning and health promotion, as a challenge to be faced by academic managers in universities.

Other methodologies are also advisable to be evaluated for similar purposes, such is the case of the study of pedagogical practices that predict perceived learning of social skills among university students (Virtanen & Tynjälä, 2022). The authors in this case achieved a sufficient collection of data concerning students from various disciplines by means of questionnaire which were then analyzed by regression analysis.

With Stanković & Nešić's (2022) study, a growing body of evidence was obtained showing both a

linear and non-linear association between excessive internet use, internet addiction and depression followed by depression-related psychopathologies such as anxiety, stress and sleep quality.

The student's well-being does not necessarily have to be at odds with educational achievement nor vice versa, in either case it can be concluded that educational achievement can be achieved in an environment of pleasure or displeasure and this evidence leads to a re-evaluation of health promotion, it is known that pedagogy considers that a constructive learning environment inevitably leads to a more effective performance.

The ethical and also logical question makes the modern university, humanist and therefore inclusive and developmental, bet on educational models in which learning takes place in environments of pleasure and therefore healthy, without any detachment from educational rigor.

In studies related to the latter issue, but with the use of samples of students from educational levels prior to university, it was obtained that the relationship between well-being and educational attainment are inconclusive, while evidence on associations between well-being and motives for achievement-related behavior is scarce (Holzer et al., 2022).

A meta-analysis such as that undertaken by Lozano-Blasco et al. (2022) shows that the incidence of internet addiction in adults was high in recent years (2017-2020) and here, again, the confining conditions referred to earlier as a result of the pandemic crisis are reinforced.

By conducting a network analysis of the most distinctive symptoms of 10 forms of addictive behaviors Zarate et al. (2022) were able to establish their behavioral similarities/interrelationships, this element offers a valuable contribution to academic managers in understanding addictions in their interconnection with learning and health promotion.

It cannot be dismissed that, during the pandemic, college students' well-being and mental health has been shaped by online learning, home confinement, and uncertainty about their future, the latter of which has been a generator of overwhelming health concerns (Ting & Essau, 2021).

In approaching the complex nature of the relationship between neuroticism and Internet addiction, Marciano et al. (2022) state that this had only been done through bivariate analyses, so their study is probably the first review to systematically and conceptually summarize the results by including additional factors.

This means that a multilateral and enriched vision of the subject is opportune, even when it is focused in a particular way on such a distinctive precursor settled in the personality as neuroticism, however, other elements that swell the complex vision of the subject are preponderant.

In line with the above Suárez-Perdomo et al. (2022) identified student profiles with similar values in excessive use, lack of control and obsession with social networks, and also analyzed whether there are significant differences in procrastination behaviors and academic performance of the identified profiles.

The cumulative effects of procrastination are complex and compromising for both educational success and health, in the end a notorious degree of judgment will fall upon the subjects that cannot be removed from the overload and effect it produces on health and self-esteem in particular.

The study by Pekpazar et al. (2021) explored the effects of self-esteem, procrastination, and Instagram addiction on academic performance in college students.

In the study by Suárez-Perdomo et al. (2022), the Social Network Addiction Questionnaire (SNAQ) and the Spanish version of the Student Procrastination Assessment Scale (PASS) were used. This procedure establishes an appropriate methodological guideline for developing studies on Internet addiction in all its implications.

It should be assumed in a related way that, according to Virtanen & Tynjälä (2022) when studying pedagogical practices that predict perceived social skills learning among students, there are pertaining factors that predicted social skills learning among university students.

While Lozano-Blasco et al. (2022) analyze the phenomenon of Internet addiction in young adults, based on a meta-analysis and a systematic review, the Eggers test used indicated an absence of publication bias in the publications analyzed from Europe, Asia, America and Oceania.

Bearing in mind that one aspect is the analysis of publications that provide data and another is

the analysis of subjects, in the latter case distinguishing the scope of both studies leads to surrogate assessments that integrate a factorization inherent to cases. To this effect Zarate et al. (2022) examined with regularized partial correlation network analysis (EBICglasso) and a community detection algorithm (Walktrap) that allowed the identification of specific links between neighboring forms of addiction and the clustering of addiction symptoms.

Partially, it could be summarized that there has been a lack of proposals that allow progress towards the understanding of techno-addictive phenomena, a situation that has influenced in a retarded way in the explanation of the problem with respect to its implication in the managerial order of the academic directors at the crossroads of addictions, learning and health promotion.

In line with this Suárez-Perdomo et al. (2022) have identified through latent profile analysis and the differences between groups were analyzed using the three-step Bolck-Croon-Hagenaars method. This contribution is very useful because it is not only focused on the comprehensive issue, but also involves the methodological issue.

The methodological approach proposals are dissimilar with regard to the study of internet addictions and academic performance, Pekpazar et al. (2021) distinguish in their work a relationship that could be assumed as a regularity, even when the results provided by these authors come from the study of a social network as particular as Instagram and, even when in addition, the survey and structural equation models were used for the study.

These methodological disagreements reinforce, in a way, the relevance of using Simanca et al. (2020) whose results show that after the validation of the model used by them, they establish that it is essential for students to know the reports of their academic performance in order to carry out a self-evaluation process, as well as for teachers to be able to see the results of the data obtained to carry out self-evaluation processes, and the adaptation of contents and dynamics in the classrooms.

Based on these findings, it is convenient to suggest the connection with the learning of social skills, since these are connected in a virtual relationship environment between peers, with the addictive triggering.

The study by Virtanen & Tynjälä (2022) investigated the pedagogical practices that predict the perceived learning of social skills among university students, and was able to explain a large part of this process by using regression models.

A diversified study in terms of the use of empirical data collection instruments corresponds to Stanković & Nešić (2022) in which participants completed paper-and-pencil questionnaires, including the Internet Addiction Test (IAT); self-report questionnaires on Internet use; Depression, Anxiety, and Stress scales (DASS-21); and the Pittsburgh Sleep Quality Index (PSQI).

As an example we have the results of Ting & Essau (2021) which were obtained from the request made to students to complete a questionnaire that, aimed to obtain information to measure substance, cigarette and alcohol consumption, psychological distress, anxiety towards COVID-19, self-regulation, as well as addiction to food, online games and social networks.

On the associations between problematic internet use and substance abuse among U.S. college students (Qeadan et al., 2022) have found that problematic internet use (PIU) is more common in young adult populations than in any other adult age group. Students who demonstrated PIU were at significantly higher risk for substance abuse behaviors, including misuse of opiates, sedatives, hallucinogens, club drugs, and inhalants, illicit use of prescription pain relievers, and diagnosis of Substance Use Disorders (SUD) also for its acronym, than their peers who did not demonstrate PIU patterns. These findings highlight the need to promote students' physical, social, and emotional well-being more effectively by considering PIU in prevention and intervention efforts aimed at decreasing the prevalence of addictive behaviors in college settings.

The addictive issue as a net disruptor of student wellbeing requires integrative studies according to a regularity present in young adults and on this issue the analysis of data from different sources, but executed on this same issue, is required to reach more solidity than the results of single studies.

In this regard, Lozano-Blasco et al. (2022) report that statistical analyses of meta-regression and model comparison show a complex problem at the international level, explained by age and sex, and



apparently also by geographic area.

In general, studies related to these problems went through very particular circumstances during the COVID-19 pandemic (Ting & Essau, 2021) point to a significant increase in the duration of time spent on online games and social networks by young people. This increase in the amount of time spent undoubtedly has a specific significance with health, the presence of stress is particularly elevated.

Despite having clearly identified the most distinctive attributes of the profiles of network addiction by university students, these being low addiction, moderate addiction, and high addiction; it was not possible to establish, however, significant differences between the groups with respect to academic performance (Suárez-Perdomo et al., 2022).

### 2.3 *Internet addiction, interconnections and implications.*

The problem of Internet addiction leads to random effects and shows a high heterogeneity in the research that addresses the issue (Lozano-Blasco et al., 2022). It is appropriate to consider that the interrelation of addictions, their alternation or even the substitution of one addiction for another, is at the center of the concern of many researchers and, consequently, its understanding is decisive to direct a managerial work in the university in which academic managers face the crossroads of addictions, learning and health promotion.

To address this issue Zarate et al. (2022) studied an online community of adults, one-third of whom consisted of women, all of whom completed self-assessment questionnaires covering a variety of addictive behaviors including alcohol, drugs, tobacco, sex, online gambling, internet use, internet gaming, social networking, shopping, and exercise.

The study by Ting & Essau (2021) examined the frequency of three specific addictive behaviors: eating, accessing social networks and online games among university students and their associations with mental health and self-regulation, which provided strong relationships between these behaviors.

In concert with these studies highlight the relationships between hedonic use, stress, and life satisfaction as predictors of smartphone addiction, the results of which indicated a good overall fit of the model employed, allowing corroboration that perceived stress and hedonic use were positive predictors respectively (Vujić & Szabo, 2022).

Through a systematic search Marciano et al. (2022) identified 56 studies related to neurotic personality traits and internet addiction and other variables, the authors grouped the latter into four groups which are (1) internalizing problems, (2) externalizing problems, (3) coping style, (4) well-being and (5) other factors.

A study that focuses on the neurotic personality type is not enough to provide generalizations regarding the causes of addictions; however, in the field of opportunities available to academic managers at the crossroads of addictions, learning and health promotion, it is a fundamental element to take into account.

Consonant with the study by Stanković & Nešić (2022) analyze the behavioral mechanisms underlying the association established between internet addiction and depression, mediated by anxiety, stress and sleep quality in medical students.

Factors of this nature are consistent with the factors found with respect to life satisfaction and smartphone addiction, in finding a direct prediction and also the relationship of such satisfaction in relation to perceived stress.

Even though up to this minute, there is not enough empirical support in the literature regarding the role of social skills in the probable prevention of addictive processes, it is not advisable to discard, in any way, the usefulness of such skills in university students in the use of social networks and technology in general.

The methodological question, the unraveling of the way to explain the acquisition of social skills by students, is also a methodological issue, and the discoveries that are continuously appearing in this field are useful and welcome. Social skills concomit with different components of well-being that

are assumed even before the student reaches the university level, in which case the different types of goals that are managed by them count.

According to Holzer et al. (2022) several effects of school-related well-being components are identifiable, particularly achievement goals and academic performance, including associations of engagement, perseverance, and optimism in their link to mastery goals, as well as optimism perseverance in relation to academic goals.

Inevitably, the approach to students' goals, even in this aforementioned vision that focuses on a moment prior to university entrance, is influenced by the addictive processes that are taking place today in a significant way in young adults and without significant distinctions according to sex.

The results of Zarate et al. (2022) showed positive network connections across different addictive behaviors, with addictive tendencies toward gambling showing the highest centrality, followed sequentially by addictive tendencies toward Internet use, Internet gaming, alcohol, shopping, social network use, drugs, sex, smoking, and exercise.

According to Suárez-Perdomo et al. (2022), three profiles are identified in terms of excessive use of social networks: low addiction, moderate addiction and high addiction. These authors found significant differences between the three latent profiles in academic procrastination, showing that the greater the addiction to social networks, the greater the procrastination behavior.

In complementation, although more specifically, can be assumed the results of Pekpazar et al. (2021) which show that Instagram addiction has a significant effect on procrastination, while it has no significant effect on academic performance.

In the study by Vujić & Szabo (2022) a higher burden of stress and satisfaction was found in smartphone use, in such a case perceived stress was predicted negatively with respect to life satisfaction and positively with respect to its hedonic use.

These elements framed in the perspectives of coping that academic managers must focus on when faced with the crossroads of addictions, learning and health promotion necessarily lead to take into account certain addictive conditioning factors, among which neuroticism stands out.

Neurotic behavior and internet addiction, according to the systematic conceptual review by Marciano et al. (2022) revealed that coping style, maladaptive cognitions and low cognitive control would partially mediate the link between neuroticism and internet addiction, while gender, age and social context would moderate the hypothesized relationships.

Given the lack of linear correspondence not found between Teaching Performance and Addiction, the need for new studies on the subject is invariably advanced, in which case it works as a preliminary hypothetical approach that, if a student addicted to Social Networks is able to obtain good teaching results, while others with similar behavior cannot, then variables that should be considered could be influencing.

According to Virtanen & Tynjälä (2022) traditional or individual learning modalities, such as listening and teacher feedback or evaluation, loaded negatively in the regression model that relates to pedagogical practices predicting perceived social skills learning among university students.

These contributions are particularly important at a time when the direct interaction of groups of students has just gone through a period of particular isolation as a result of the conditions imposed by the Covid 19 pandemic, a time when exchange through networks prevailed.

We should not lose sight of Lozano-Blasco et al. (2022) who state that there is an increase in Internet addiction in the new generations, in which other variables play a relevant role, such as: increased individualism, less sociability and enculturation.

In this context, skills are determinant not only in the facilitation of knowledge exchanges, but their collateral implications in the affective and emotional sphere must also be taken into consideration.

Not far from these analyses, Stanković & Nešić (2022) state that the association of Internet addiction with sleep quality was completely mediated by anxiety. On the basis of this relationship it is appropriate to comment that, currently, an area of study is increasingly explored and, which focuses its attention on the assessment of anxiety, by taking into consideration the physical effects

that digital devices are able to exert in the process of emergence and establishment of anxious behaviors.

Internet addiction is ceasing to be a unitary manifestation and may instead be seen as related to other addictions; Zarate et al. (2022) note that symptoms associated with disordered drug use and gambling maintain the severity of addictive disorders while increasing the likelihood of developing cross-addictive behaviors.

However, Ting & Essau (2021) report a low prevalence of stimulant substance use during the recent confinement stage because of Covid 19, particularly as related to cigarette and alcohol use over a 30-day period, although they note that positive correlations of significance were found between the three addictive behaviors (addiction to food, gaming, and social networking) and psychological distress.

Psychological distress holds probable connections with the compensatory use of digital artifacts, among which is the smartphone, one cannot lose sight of the increasing amount of services that continue to be incorporated into these mobile devices, a situation that results in greater convenience for an expeditious enjoyment of them. According to the theory of compensatory Internet use could be associated with addiction to the use of smartphones (Vujić & Szabo, 2022).

Regardless of the type of device used by students, it is observed during this literature review that addiction behavior behaves independently of the type of device used by the student and, subsequently, procrastination behavior usually appears.

An analysis in this direction is provided by Suárez-Perdomo et al. (2022) when they refer that although addiction to social networks is related to procrastination behaviors, it is considered that they could be a useful resource in the initial training process of undergraduate students. The challenge in such a case is how to match the use of networks in a refined way in order to take advantage, through it, of the multiple educational resources that may be available.

A beginner student adapted to the use of social networks, carries with it strengths to initiate their learning, as long as these are previously accommodated to their basic knowledge, thus being able to model the educational intervention from their own experiences.

It is important to take into account, however, the risk to which students may be subject to incur in the excessive use of networks through procrastination behaviors. Prevention in such a case becomes a challenge for educational work with students in both the initial and subsequent courses.

For their part Pekpazar et al. (2021) point out that self-esteem in college students, tends to have a significant direct effect on Instagram addiction and procrastination, while it has an indirect effect on academic performance.

The use of networks in this case, becomes a space for the full exercise of collaborative learning among students, an expeditious way for the exchange of knowledge and updating; according to Virtanen & Tynjälä (2022) collaborative and active forms of learning are very significant in the acquisition of social skills.

Social skills are an absolute response to the realization of the health promotion policy to which academic managers are committed, in particular as regards mental health, so that the association of Internet addiction with depression, anxiety, stress and quality of sleep becomes a medium point of attention.

On the latter relationship involving such crucial aspects of student health as internet addiction with depression, anxiety, stress and sleep quality Stanković & Nešić (2022) indicate that with their study that one can contribute to the academic community by improving mental health prevention programs for students.

Meanwhile Lozano-Blasco et al. (2022) stresses that Internet addiction is revealing the need to address this problem from a public health approach, since the issue goes beyond the institutional university competencies and affects in a varied direction to the point of requiring the involvement of other social actors.

Arriving at the time of the visible health impairments that have accumulated as a result of Internet addictions, discussion has turned to the clinical implications for the assessment and

treatment of addiction comorbidities and the replacement of one form of addiction with another (Zarate et al., 2022).

There are direct and indirect relationships between self-esteem, Instagram addiction, procrastination and academic performance; it should be noted that these variables are usually related by university teachers without empirical support; however, they have been found by Pekpazar et al. (2021).

Here again, the model of Simanca et al. (2020) could show its viability to provide academic data that could ultimately relate the diversity of variables, taking into account their timeliness, as well as the importance of the data that educational institutions can provide for decision making.

Vujić & Szabo (2022) found that life satisfaction did not directly predict smartphone addiction, however, an indirect effect, through perceived stress, was statistically significant.

Based on the findings of Marciano et al. (2022), these authors propose a theoretical model that would advance the understanding of the long-term consequences of Internet addiction as a growing phenomenon that deserves to be taken into consideration.

While the comprehensive problem obviously affects the study of student Internet addictions, this problem cannot be seen in isolation from the obvious lack of models that facilitate distinguishing addiction in unity with procrastination and academic performance, in real, everyday life one phenomenon does not usually occur in a disconnected manner from the other.

Internet addictive behavior is mainly focused on connections with other types of addictions, such a situation merits the continuity of studies on the relationship of this diversity of addictions that are currently affecting a significant mass of young people of both sexes. Studies have been developed based on more discrete instruments for obtaining empirical data, but they provide valuable elements that help notably in the understanding of these addictive relationships and should therefore be taken into account.

On addictive behavior to technology there have been studies such as that of Vujić & Szabo (2022) showing differences with respect to the sex of the subjects studied, in this own case it was found that women showed greater addiction to smartphones than men. These results should not be seen separately from the findings of (Marciano et al., 2022) indicating prediction to internet addiction, which, in turn, would predict health-related consequences, as well as results referring to internalizing and externalizing symptoms, general well-being and poor academic/cognitive performance.

The continuous references in specialized publications, regarding the prevalence of neuroticism in the female sex more than in the male sex, do not allow to establish, to date, a sufficiently solid relationship between Internet addiction and the precursors established in the behavior by sex, nor are the data that emphasize that men tend to be more distracted and therefore more procrastinators than women conclusive.

Faced with the growing diversity of criteria that concur today from the theory, academic managers have been placed at the crossroads of addictions, learning and health promotion, therefore they need to know in advance the multiple implications of the Internet in these three spheres of student's life. In this case, collaborative learning reserves notorious potentialities that can be exploited in the conception of educational processes to overcome the crossroads of addictions, learning and health promotion in the university environment.

#### 2.4 What is proposed as coping?

The narrative review by Cemiloglu et al. (2022) examined digital addiction countermeasures proposed in the last ten years. The authors assume as countermeasures the strategies and techniques for prevention, harm reduction and intervention towards addictive digital behaviors.

Faced with the need to collect the information that the director, the teacher and finally the student need for decision making, Simanca H. et al. (2020) propose a system, capable of displaying statistics on historical data of students and teachers taken throughout academic periods.

Information of this magnitude is crucial in order to direct the interventions that academic directors are faced with at the crossroads of addictions, learning and health promotion, for which the appropriation of social skills is a determining factor.

In particular the study related to combating digital addiction refers to the adoption of current approaches to distinguish future directions (Cemiloglu et al., 2022) distinguish as main countermeasures in four fundamental categories, they are psychosocial, software-mediated, pharmacological and combined.

It is insistently heard that, in this context of prominent complexity, the use of countermeasures against the addictive issue is of little value, the uselessness of restricting the use of ICTs is raised even when it is very visible that they are affecting so increasingly the health of the population in general and the health of students in particular. A result in opposition to the above is provided by Cemiloglu et al. (2022) when they state that in general, it has been shown that the proposed countermeasures were effective in reducing addictive digital use.

The authors cited above, however, add that a general statement on the effectiveness of the proposed countermeasures cannot be made due to inconsistent conceptualization of digital addiction and methodological weaknesses.

### 3. Conclusions

The challenge currently posed to academic managers and underlying the crossroads of addictions, learning and health promotion in the university environment, requires a comprehensive deepening of the addictive problem on continuously renewed theoretical bases and by virtue of the recognition of methodological shortcomings that force to rethink the way how to examine the problem of these complex interrelationships.

The results provided immediately contain in their proposals a consensus opposed to the countermeasures proposed as the most immediate way of coping and instead urge the integration of approaches in which the proactive, conscious and preventive attitude of the student becomes the route, so far the most convincing to overcome the risks.

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