Keywords: DSM-IV; Rubik Cube; Workaholic; Drugs against dementia

Introduction

Work-related addiction can be considered one of the "new behavioral addictions" as no addictive substance is taken by the individual. From the second half of the twentieth century onwards, researchers have focused their attention on various forms of behavioral addictions such as physical exercise, compulsive shopping, playing computer games, gambling, excessive internet use and even addiction to the Rubik Cube [1]. Over the past few decades there has been great interest in an addiction related to work with various descriptions such as workaholism, work addiction, excessive work, being used interchangeably.

The DSM-IV makes no mention of workaholism, but in the section devoted to the obsessive compulsive personality disorder, it refers to excessive devotion to work and productivity leading to the exclusion of leisure activities and friendships (Criterion 3). There is no justification such as economic necessity for this behavior. Subjects often feel that they have no time to take an evening or a weekend off to go on an outing or just relax. They may keep postponing a pleasurable activity, such as a vacation, so that it never takes place. When they do take time for leisure activities or vacations, they are very uncomfortable unless they have taken along something to work on so as not to "waste time."

The DSM-IV-TR [2], likewise, contains no diagnostic criteria specific to workaholism (a term not mentioned in the manual), which is simply considered a symptom of obsessive-compulsive personality disorder, characterized by a strong impulse to work, perfectionism and rigidity.

The DSM-5 [3] also fails to mention workaholism so did the ICD-10 (1992, World Health Organization).

Most definitions describe this addiction as a chronic behavior, excessive dedication to work, characterized by a high number of working hours beyond those required by the regulations, stated or implied, to such an extent as to render the subject completely absorbed by work [4-9].

Although most authors agree on the definition of workaholism, not everyone agrees on the meaning of this construct, because some, above all in less recent research studies, claim that workaholism can be considered a positive attribute as it denotes a strong motivation to work [8,10]. On the other hand, others emphasize the negative aspects such as compulsive and overly rigid behavior [4,7,11,12].

However, although nowadays most researchers agree on the negativity of the construct, it is often difficult to identify the addicted subject, because we live in a society in which working many hours non-stop is considered to be a positive quality, which distinguishes that individual from the others (the "good worker") [13]. In addition, the instability of the labor market and a sense of insecurity, make people willing to work longer hours, for fear of losing their jobs.

Work addiction is commonly referred to as workaholism in analogy with alcoholism or alcohol addiction. In other countries the phenomenon is referred to with different terms: in Germany Arbeitssucht (literally, addiction to work), while in the Japanese language the term Karoshi indicates death not because of accidents at work but due to an excessive workload borne by an individual worker [14]. Before the term 'workaholic' was coined, Italians used the positive term 'Stakanovisti' to describe these individuals (from Stakanov, the Ukrainian worker who developed a technique which, in less than 6 hours, allowed the extraction of a quantity of coal 14 times higher than that achieved by standard methods).

Many authors have dealt with the problem, giving different definitions and analyzing its many aspects. The objective of this review is therefore to present the various aspects of this behavioral addiction useful for identifying areas for future inquiry.

Definitions

The first to use the term ‘workaholic’ was Oates (1971), who used it to refer to a subject who feels the compulsion or uncontrollable need to work incessantly. Subsequently, the term was used extensively in the popular press, websites as well as in scientific literature [15].

Mosier [16] defines this addiction only in terms of hours spent working, over 50 a week, unlike other authors who focus mainly on the attitude towards the job.

Spence and Robbins [9] argue that the “real” workaholic is extremely committed to his work activities, feels compelled to work, is driven to do so by internal pressure and derives little pleasure from working. The same authors have created a scale of measure for the construct based on these three factors.

Scott, Moore and Miceli [8] studied the characteristics of the...
workaholic and formulated a construct. They distinguished three elements: the individual invests the majority of his time in work even when he has the opportunity not to do so, he constantly thinks about work even when he is not physically at work, he works longer than that required by the organizational and economic standards.

Ng TWH, et al. [5] defined workaholism as a construct characterized by an emotional component, a cognitive component, and a behavioral component. According to these authors, such individuals become obsessed by work, so they spend a great deal of time working and draw pleasure from it.

At first glance this definition appears to conflict with that of Spence and Robbins [9]. However, it is interesting to note that Ng Twh, et al., [5] speak of ‘drawing pleasure’, referring not to the actual work done by the workaholic, but rather the act of work itself. Indeed, they do not consider the so-called ‘joy in work’ to be a component of workaholism, as claimed by other authors [17], but rather a part of work engagement.

Clinical Characteristics

Schaufeli, et al. [18] speak of two components of the construct: working excessively and working compulsively, which is similar to Oates’ original definition, who saw this addiction as an irresistible, obsessive drive to work exaggeratedly hard. According to these authors, workaholism has a negative impact on various aspects of life. With regard to the work environment, the addicted individual seems to have poor social relationships with work colleagues, probably because of his need to control his actions, and inability to delegate to others. In addition, spending most of the time at work, the individual has no time for other activities: this has a negative impact on his social and family life often leading to a lower attachment to the family, and more marital problems than non-workaholics. The state of his health is also negatively affected: given the many hours spent at work, he has no way of recovering from tiredness, thereby risking the exhaustion of his mental and physical energies more frequently than non-addicted individuals. There was no evidence of any relationship between workaholism and absences from work due to illness. The workaholic, rarely asks for permission to be absent from work, despite reporting symptoms of fatigue and malaise. This is probably due to his strong drive to work, which has the characteristic of a real compulsion, and his inability to detach himself from work [19,20]. ‘The addicted person usually builds his life “around work,” is a perfectionist, with a strong work ethic, so much so that he often denies having health problems and goes back to work before being fully recovered from an illness. This disregard for his health can have adverse consequences by weakening his physique and putting him more at risk from further problems. Aziz and Zickar [15] propose analyzing workaholism as a syndrome: They consider it as a multidimensional construct. These authors start from Spence and Robbins’ definition [9] who considered this addiction as characterized by one or more of these components: high work commitment, high work drive, little pleasure in doing work (lack of enjoyment); they consider the presence of more than one of these elements as being necessary in order to define the individual as a workaholic.

The workaholic has not only been defined conceptually, but has also been classified according to the various nuances of his behavior, both positive and negative. Having a life full of activities and working as many hours as possible is now an accepted lifestyle and considered a prerequisite for professional success. In some highly industrialized countries, such as Germany, the habit of taking drugs to enhance job performance has been in use for some years. These are not illegal drugs but antidepressants, psychostimulants, drugs against dementia and concentration deficiency that, however, contain elements of amphetamines or Ritalin. These drugs can create serious health problems and even cause severe mental disorders.

However, it is a mistake to identify those who work a lot as being workaholic; Furthermore, it is incorrect to think that all those who work hard may suffer negative consequences from this behavior.

Classifications of Workers

There are different classifications related to workaholism whose usefulness is not always obvious because they often lack empirical evidence. However Spence and Robbins [9] and later Buelens and Poelmans [21], identified through cluster analysis different profiles arising from the high-low combinations in three dimensions so conceived by WorkBat [9]. Therefore, the profiles obtained, appear to be the combination of the Work Involvement, Work Enjoyment and Driveness.

• The Workaholic (high Work Involvement, high driveness, low Work Enjoyment).
• The Work Enthusiasts (high Work Involvement, low driveness, high Work Enjoyment).
• The Enthusiastic Workaholic (high Work Involvement, high driveness, high Work Enjoyment).
• The Unengaged Workers (low Work Involvement, low driveness, low Work Enjoyment).
• The Relaxed Workers (low Work Involvement, low driveness, high Work Enjoyment).
• The Disenchanted Workers (low Work Involvement, high driveness, low Work Enjoyment).

This classification has been greatly criticized because it considers enjoyment as a component of work addiction (Mudrack,) [22] while most authors claim that the true workaholic does not derive pleasure from working hard. Buelens and Poelmans [21] however added two additional profiles:

• The Reluctant Hard Workers (high Work Involvement, low Driveness low, low Work Enjoyment).
• The Alienate Professional (low Work Involvement, high Driveness, high Work Enjoyment).

Another interesting classification of different types of workers is that proposed by Fassel [23]:

• The Compulsive Worker, characterized by such a strong form of compulsion toward work that leads him to be extremely perfectionist.
• The Busy Worker who shares the appearance of compulsion with the previous profile although this is not stable over time and varies in intensity, sometimes reaching extreme limits.
• The Hidden Worker, who is aware of being inadequate in regard to his work and yet sets himself to work only when his behavior cannot be observed by other people.
• The Anorexic Worker who evades his addiction by adopting avoidance strategies which, however, are a cause of guilt.

The main limitation of this classification is that it is based on theoretical deductions, from clinical experience, but without empirical studies.
Schaufeli, et al. [19] distinguish between “bad” and “good” types of intense work: Workaholism (similar to the Spence and Robbins’ concept of reliance on work) and Work Engagement (similar to the work enthusiast of the above authors). The first type of intensive work is characterized by a tendency to work excessively and intensely, to be obsessed with work, an obsession which is manifested in the compulsion to work. The second type of intensive worker derives positive satisfaction from work and through working intensely shows vigor, dedication and absorption. This vigor refers to the high level of psycho-physical energy given off by the subject during work, his will to tackle difficulties and the tenacity with which he solves problems. Dedication is defined as the total commitment to a given work that generates enthusiasm, inspiration, courage and a sense of being challenged in the subject. Absorption refers to being fully and deeply engaged in a given work so that time passes quickly.

These two different types of hard work entail different consequences:

A workaholic suffers negatively more than the work engaged both at the individual level and at the organizational level. This may be due to having more interpersonal conflicts in the workplace and less satisfaction [24], a greater tendency to bring work home [11,25] fewer social relations [17,26], more stress and more health problems than the others [24,27]. The work engaged have more ability to take personal initiatives, they perform better in their assigned jobs, they pay more attention to the organizational aspects, they are absent less and have good mental and physical health [17,28].

Although apparently these two types may look similar, what make them different are the outcomes they produce.

The distinction between workaholism and work engagement has been analyzed by multiple studies, which consider different psychological constructs, such as motivation and mood. Beek, et al. [29] differentiate four types of workers: workers who are workaholic and not engaged (real workaholic), workers who are not workaholic but are engaged, the workers who are both one and the other, and those who are neither one nor the other (people satisfied with their work, who do not go beyond the requirements, defined as moderate). The study distinguishes these four groups for different levels: a. motivation; b. health and wellness; c. burnout.

- **Motivation**

  The theoretical framework on which the study is based is the “Self Determination Theory” [30], a theory which talks of the motivation that regulates action and distinguishes intrinsic and extrinsic motivation.

- **Health and wellness**

  The authors take into account the Effort-Recovery Model of Meijman and Mulder [31] to examine the consequences of working intensively on health and well-being. According to this model, recovering from the fatigue of work takes time, so that our psychobiological system can return to its baseline level. If we do not have the time necessary to restore the balance, we fall into a downward spiral and therefore special effort is needed to maintain performance at the same level. This can lead to long term health problems such as exhaustion, sleep disorders and psychosomatic symptoms.

- **Burnout**

  The research also addresses the problem of burnout described by numerous studies as a lack of recovery from the stress of the job. This condition is associated with various symptoms: sleep disturbances, cardiovascular problems, psychosomatic symptoms, anxiety and acute infections [32].

  The results of the research can be summarized in three conclusions:

  - Workaholics are led by a controlled/extrinsic motivation; While the Engaged, driven by autonomous/intrinsic motivation.
  - The Engaged who are also Workaholics are driven by both types of motivation: autonomous and controlled. The differentiation of Taris et al. is interesting [33]: workaholics are “pushed” into their work, while the Engaged are “pulled”. The Engaged Workaholic is the group that passes more time at work because they also gain enjoyment from it.
  - The Workaholic is more at risk from burnout than the Engaged Workaholic. This result suggests that it is precisely their commitment to work which protects against the negative consequences of excessive work.

Shimatzu et al. [34] in their study on a sample of Japanese workers of a company that produced machinery, measured through questionnaires, the level of workaholism, work engagement, health, life satisfaction, performance employment, and demographic variables. What emerged was that workaholism and work commitment were poorly correlated. Workaholism was related to an increase in health problems and a decrease in life satisfaction. In contrast, however, work engagement was associated with a decrease in health problems, an increase in life satisfaction and better job performance.

Using the MAI Model (Mood As Input) Martin et al. [35] studied the role that mood plays in choosing to continue or to stop working. In particular, they talk of personal cognitive rules that people use to assess the task being done: some may assess the task based on the fruits of their work while others may judge the task according to the enjoyment that the work gives them.

The authors showed that their mood directs individuals engaged in a particular task to continue or to stop. In particular, it was shown that, when the subjects were given precise instructions on when to stop doing a certain action, subjects with a negative mood stopped later than those who were in a more positive mood.

On the other hand, when the rules related only to enjoyment, it was observed that those in a positive mood (enjoyment in the task) continued longer than those in a negative mood.

Based on these results, MacDonald and Davey [36] used this model to explain some basic features of obsessive compulsive disorder: it would also be the positive or negative mood to stop or to continue the compulsion.

This aspect is also relevant to the study of workaholics, as in fact the literature makes an association between this addiction and obsessive compulsive personality traits [37].

In conclusion, taking into account the MAI and the obsessive-compulsive personality, we can expect that both the rules of time and mood are useful for discriminating between the workaholic and the engaged worker.

However, an interaction between these two elements was not found. It was shown that continuing to do something because it was felt that not enough had been done was associated with workaholism while continuing to work for pleasure was associated instead with work engagement.
There is no evidence to show that mood is a real input, but rather a way to evaluate the state of things. Therefore, the workaholic would use their negative mood to assess whether they had done enough whereas the work engaged would use their positive mood to understand how pleasurable the task being performed was for them.

Differences in the Distribution of the Problem, with Regard to Gender, Culture and Working Environment

From the studies on the different distribution of this addiction in the population, contradictory results often emerged regarding socio demographic variables such as gender, age, employment and culture.

Gender, age and status: Burke [24] recorded no difference between the two sexes, in contrast to other authors [38] who claimed that it was more of a problem for males.

With regard to age, Burke [39] did not record any significant differences: while, on the contrary, other authors [25,40] found an increased presence of the problem among young people.

Marital status did not seem to affect workaholism, although Oates (1971) described the possibility that a workaholic spouse may lead their spouse to implement similar behavior.

Snir and Harpaz [40] spoke of differences related to spiritual and religious spheres (cultural), as for example, Calvinist culture, which is centered on work.

Cultural Aspects

In their cross-cultural study Snir and Harpaz [41] showed that excessive commitment to work (heavy work investment, which in part is due to workaholism) was greater in poorer and more backward societies. This is because common survival values are still rooted and widespread in countries such as Hungary, Bulgaria and Russia, in contrast to the richer, and more advanced countries such as Australia, Great Britain, and the United States where self-realization and the quality of life are the predominant values. It was also found in this study that the countries in which the Mastery Value, (the tendency to manage and change the world), predominated, such as the United States, Mexico, Japan, were also those where there was an elevated level of heavy work investment as opposed to societies in which harmony and the maintenance of the status quo prevailed.

The study also took masculinity into account in relation to workaholism: the countries considered masculine (in which man is seen as more assertive and success oriented, compared to women who are more involved in the care of the house and oriented to the quality of life), such as Japan, Hungary, Switzerland, Mexico, seem to register higher levels of heavy work investment compared to countries in which the social roles of men and women overlap.

The authors also made a distinction between individualistic cultures and collectivistic cultures: in the first, the high commitment to work would be driven by a personal motivation (e.g. achieving excellent results to promote one’s career); In the second it is driven by group motivation (e.g. achieving good results for the team or organization).

With regard to employment status, Harpaz and Snir, saw workaholism as more prevalent among managers and professionals and more so in private than public organizations.

Epidemiology

There is little literature regarding the epidemiology of the phenomenon and often no specification regarding the classification used.

The prevalence of the dependence on work is estimated at between 27 and 30% in the general population. It is correlated to the number of hours of work per week and tends to be higher as annual revenue increases. The sex ratio is 1, and the parents of children 5 to 18 years of age are the most susceptible to considering themselves workaholics [42]. In the US 25% of man and 11% of woman work more than 50 hours per week [43]. In Europe 20% of man and 7% of woman [44] in Japan 28% of Japanese work more than 50 hours per week and 12% more than 60 hours [45]. Aziz and Zicker [15] in another study showed a distribution of the problem around 23% of the working population, using Spence and Robbins’ classification to assess the level of workaholism. These data, however, are only indicative, partly because of the many different definitions of the construct, and partly due to the differences with which hard work is interpreted in different cultures.

Theoretical Approaches to Workaholism

Different theoretical approaches have tried to investigate the peculiarities of workaholism by analyzing its antecedents and characteristics. There is no one theoretical approach to this addiction but rather several theories interpret the construct, which are summarized here [46].

The personality theory

To consider this addiction as a tendency of personality traits, means reading it in terms of stable characteristics that are formed over time, usually becoming stabilized in adolescence, and which can be reinforced by environmental and personal conditions such as stress [47]. The main limitation of this vision is that there are no empirical studies supporting it. Specifically, the personality characteristics most commonly recorded in these subjects were the obsessive-compulsive personality traits that extend to all areas of their lives, not just work [48]. Other authors found similarities between workaholism and type A personality; in particular, the tendency to seek success and achieve aims may lead to working an excessive number of hours [10]. Ng Twh et al. [5] argued that when self-efficacy related to their ability to work is higher than that related to other activities, it is possible that there is a greater propensity to exhibit behaviors related to workaholism (it is in fact likely that employees have more confidence in achieving their business objectives due to the large amount of time spent at work). Griffiths [1] stated that in order to define workaholism as a true addiction, you need to share with the other dependencies criteria such as:

- Salience: work is the most important activity in the life of a person, and dominates thinking and behavior even outside traditional places and work times.
- Mood Transformation: work is associated with moods that subjectively may vary (excitement, evasion, tranquility).
- Tolerance: The workaholic is forced to progressively and gradually increase the amount of time spent performing work activities.
- Abstinence: the employee is adversely affected, both physically and psychologically (irritability, mood swings) by situations in which he is not allowed to work, such as vacations, illness, and so on.
- Conflicts: the workaholic has difficulty with interpersonal relations (colleagues, family members) and with other non-work activities (hobbies) and personal (loss of control).
work addicts are criticized by others and so stay on at work so as not to perfectionism; the fear of monotony, leading to taking up more and its association with emotions (2006) is also highly interesting. It to have positive emotions, in which case we speak of sublimation. These obtain positive results in other areas of life, in which case we speak of sublimation. These two conditions can be realized by working hard [49].

The analysis carried out by Killinger on this addiction and its association with emotions (2006) is also highly interesting. It underlines the importance of the role played by fear. The fear of failure (such as being fired) resulting in an increase in working hours and perfectionism; the fear of monotony, leading to taking up more and more challenging tasks; the fear of laziness, causing the subject to take home an increased workload and finally the fear of discovery, as often work addicts are criticized by others and so stay on at work so as not to be judged negatively when they work excessively.

### Cognitive approach

In general, the cognitive approach is based on the concept that individuals use certain mental patterns that they have built up, starting from assumptions or beliefs or automatic thoughts, which are maintained through processes of rational and irrational processing [50]. These principles can also be applied to the workaholic, who, starting from erroneous beliefs tends to act out compulsive behaviors in his working life such as working excessively. This belief, thinking that the problems and tasks regarding work are more important than those pertaining to the spheres of personal, family and social (non-working) life, can be considered to be the antecedents of workaholism. These assumptions lead the individual to develop selective interests in certain conditions and problems, to do with the world of work, which cause him to act out behaviors in keeping with his beliefs. Burke shows how workaholics have a greater frequency of beliefs such as testing themselves, moral principles and the propensity towards others [51].

### Learning models

In learning models there are two main theories that explain why workaholism would develop: Skinner's operant conditioning of [52] and Bandura's social learning theory [53]. The idea behind operant conditioning is that some external reinforcements can bring about a certain behavior. In the specific case of workaholism, work incentives are an example of the positive reinforcement that drives us to work more and more. Such a theory, however, is in contrast with the definitions set out above relating to the motivation underlying this addiction.

Bandura's Social Learning Theory [53] speaks of imitation and modeling: workers, by observing significant others such as managers, leaders and colleagues, can then imitate them and work more and more. Basically, positive reinforcement can be considered good if it acts as a reward for completing a given task done well, but it can take on a negative meaning when it becomes a way to enact behaviors that serve to escape from unpleasant family and personal situations.

### Psychoanalytic approach

Psychoanalysis considers this work addiction as a form of compensation for a narcissistic wound; a kind of defense mechanism. Freud speaks of subjective identity as the way a person perceives himself. However, one's perception of oneself depends on comparison with others, who act as a mirror. Insufficient attention from one's family and significant people can produce a narcissistic injury and an inability to love oneself leading to a drop in self-esteem [54,55]. The consequence of this condition is to search for confirmation from others and the implementation of socially valued behaviors as for example hard work.

### Family dynamics

Family dynamics may play an important role in the development of workaholism [25,56]. In particular, there are dysfunctional dynamics, both between spouses and between parents and children, such as hyper-responsibilization of children by their parents, or atypical forms of division of family roles. As with the other theories, the literature does not provide sufficient experimental data to prove that the family of origin may be a risk factor.

O'Driscoll and McMillan's bio-psycho-social model

O'Driscoll and McMillan's bio-psycho-social model [49] discussed a set of factors and causes that lead to the development of this addiction, integrating theoretical approaches previously mentioned. The authors refer to Engel's model, created for the medical environment which envisages the presence of five integrated components, involved in the onset and development of a given medical case. The components are: biological predisposition, learned behaviors and their implementation, the emotions, cognitive processes and the environment. McMillan and O'Driscoll state that it is highly unlikely that workaholism arises from a single event, can be explained by a single theory, or treated by a single therapeutic approach. It is not just an individual problem but a systemic one, whose responsibility must be shared between employers, HR managers, therapists, legislators, executives, families and single workers. The basic principle is precisely the set of different dimensions that interact with each other (predisposition to addiction, personal history, environment, thoughts and beliefs about the compulsion to work).

### Measurement Scales

In the literature, there are some scales to measure the construct of workaholism that can be used both for clinical and research purposes.

- Spence and Robbins [9] are the authors of the BAT; the Workaholism Battery. This tool is related to their theoretical approaches towards work and is constituted by three scales: 1) work involvement 2) feeling driven to work 3) work enjoyment. This scale consists of 25 items on a 5-point Likert scale (from strongly disagree to strongly agree). Although it is a widely used scale it has limitations: for example, the subscale that measures work commitment does not seem to have good psychometric properties [57,58]. Furthermore, the subscale of work enjoyment has also been criticized.

- The first quantitative scale for this construct is the WART [59]. The items were constructed from the symptoms reported by patients and by those who had family problems relating to workaholism. This scale consists of 25 items on a 5-point Likert scale (from not true to completely true). Initially, the 25 items were divided into five subscales: 1) compelling tendencies, 2) control, 3) impaired communication/self-absorption; 4) inability to delegate, 5) self-worth.

Research showed that the subscale, which analyzed the compulsive tendency, was the most important for measuring the construct.
• Schaufeli, et al. [11] developed a new scale, called the Dutch Workaholism Scale (DUWAS). This tool uses the definition of author's work addiction (enormous expense of time and energy in working activities with a constant obsession for work), summarized in two dimensions; working excessively and working compulsively. The scale consists of 5 items for compulsions, similar to those of the dimension of Compulsive Tendencies of the WART (which they rename working excessively) and 5 items of the dimension of being driven to work from the Workaholism Bat, which they call Working Compulsively.

• Another scale is the SNAP-WORK (The schedule for Non-Adaptive Personality Workaholism scales) [60], which is composed of 18 forced-choice items (yes/no). The scale identifies addicted individuals as those who earn high scores. In particular, the instrument investigates some traits of the obsessive compulsive personality, according to some sub-dimensions such as perfectionism, rigidity and self-imposition of duties etc. Although it has good psychometric properties, it had not been tested by any study in the literature.

Andreasen, et al. [61] created a new scale, the Bergen Work-Addiction Scale (BWAS), by considering six elements proposed by Griffiths to define variables such as: salience, mood changes, tolerance, withdrawal, conflict, relapse. It consists of 14 items; two for each dimension and each item is on a 5-point Likert scale (from "never" to "always").

In conclusion, these tools presented are self-reports of which are known limitations (e.g. Consistency Effect, Social Desirability). It is desirable that in the future will be also considered the possibility of adding scales for hetero-evaluation of the workaholism.

What are the Direct and Indirect Effects that this Dependence can Produce?

Schimatzu, et al. [62], who studied the relationship between this addiction, work performance and health status, hypothesize that coping strategies can help by mediating between these three factors. In particular, they considered active coping and emotional discharge. The first would decrease the tension in a given work situation through a cognitive analysis leading then to the implementation of concrete actions to solve the [63]. The second referred to a discharge of negative emotions on others [64,65]. The results of this research showed that addiction to work was correlated with health problems. Further research is desirable to accurately identify the different forms in which the health problems may occur.

A study by Schimatzu, et al. [66], carried out an analysis of Japanese workers (husband and wife), and investigated what effects workaholism had on them. Working long hours in this country, is not only an economic but also a socio-cultural issue [40]: work is seen as a duty to the company and to the individual himself. Furthermore, in Japan, the number of women who work is increasing, thereby causing changes, at least in part, in the roles within the family (Ministry of Health, Labor, and Welfare, 2010). However, gender differences are still strong: it is still primarily women who take care of family and home even in families in which both partners work. The purpose of the study was to understand whether the workaholism of a spouse may have an impact on the whole family, the couple or on the health of the addicted individual. To answer these questions the authors referred to the spillover-crossover model [67], which proposed a transmission of job strain and stress, both at inter individual level (husband to wife and vice versa) and from one area of life to another (working environment and family environment). This current study focused on the work-family-conflict or spillover, which was defined as "a form of internal conflict in which the domains of work and family are mutually inconsistent". This definition showed a bidirectional relationship between family and work, in which the family can interfere with work life: family-to-work conflict (FWC), and vice versa: work-to-family conflict (WFC). Addicted workers dedicated a larger amount of time and energy to work than to family, delegating all the duties and commitments towards the house and children to the partner, thus creating a situation of WFC to the delegated partner. The expectations of the authors were that the workaholic would have higher levels of WFC and psychological distress than "relaxed" workers, and also that the partners of the addicted subjects would have a higher level of psychological distress compared to FWC and "relaxed" partners. The study also took into account the effects of workaholism on the life of the couple in the light of gender differences in Japanese culture. Japan is a country where the culture of working long hours prevails, and it is difficult to find a balance between work and family life [68]. This has increased since 1991, year of the economic collapse, leading to increased competition between industries, resulting in a decrease in job security and consequently longer working hours. The authors stated that workaholics of both sexes had more conflicts between the world of work and the family (WFC) and more psychological distress than relaxed workers. Furthermore, the study showed that the husbands of workaholic women experienced more frequent conflicts between family and work (FWC), while the wives of workaholic husbands did not exhibit this type of conflict. This could be explained by the difference of gender division of labor and family care, at least as regards Japanese couples.

Cross-cultural research could allow a more accurate analysis of family conflicts related to workaholism.

A Brief Reference to Treatment

Little mention is made in literature of ways of treating this dependence.

Self-help

One of the most commonly used approaches is self-help. There are groups such as Workaholics Anonymous, which originated in the United States in 1983 and uses the same approach as Alcoholics Anonymous. The idea is to make people believe that this is a disease which is difficult to completely cure and that it is necessary to beware of all temptations. Another peculiarity is the spiritual character of these groups, as demonstrated by the program of the twelve points (also shared by the AA). The groups meet regularly and frequently and each individual tells his story and listens to the stories and the experiences of those with the same problems as his, and those who were addicts in the past.

The group helps the workaholic because it offers him emotional support, understanding, and a social network that can alleviate his isolation.

REBT

Another approach that seems to be successful with these subjects is Rational Emotive Behavioral Therapy (REBT) by Ellis [69-71]. The principle on which it is based is that irrational thoughts (or cognitive distortions), can play a role in causing psychological distress [72]. Often at the root of disturbed behavior, such as work addiction, there are unrealistic and sometimes even irrational standards, such as those which the workaholic tries to meet in relation to his performance.
According to the results of the study by Van Wijhe, Peeters and Schaufeli [73], REBT appears to have positive effects on the workaholic’s irrational beliefs.

Other types of treatments

Other types of treatments mentioned in the literature as being successful with workaholics are: cognitive behavioral therapy [74], relaxation training, stress management techniques and assertiveness training [75].

It is important that the therapist understands the obsessive-compulsive traits of the patient and knows how to identify the negative behaviors being enacted [36] in order to help the individual to modify and replace them with more adaptive behaviors. The workaholic must be positively reinforced when he manages to reduce the excessive amount spent at work and when he does not respond to the vicissitudes of life by working compulsively.

The problem can also be addressed by the organization that represents the “pusher” of this “drug” (working compulsively) through promoting good health and using preventive techniques as well as trying to create an organizational culture based on a good balance between work and the workers’ well-being.

Although identifying addicted subjects is often difficult since hard work is considered an appreciable quality in our society the organization should try to recognize possible at-risk individuals and offer them psychological support.

Finally it is also desirable that the specific evidence-based treatments to be developed for this type of patients as happen for example for pathological gambling.

Conclusions

Workaholism is a growing phenomenon and the number of authors dealing with the subject under study is also increasing. First, it appears difficult to define the construct, because of the number of the definitions and the difficulty in clearly understanding the phenomenon. Indeed, some researchers speak of true addiction, while some speak of obsessive-compulsive disorder, and others of a specific syndrome.

Secondly, it is difficult to define the workaholic subject since hard work is too often characterized as being a valuable quality of the individual. Therefore, it is essential to have the measure of the construct, so as to make it objective.

It is fundamental to understand how to differentiate disease from normality: the workaholic from the work engaged.

The first is an individual driven to work compulsively, sometimes with disastrous consequences for his physical and mental health, and the second is a highly motivated individual, deriving a deep satisfaction from his work.

Thirdly, once the workaholic is identified, it is important to act quickly to reduce the damage to the individual, the family and the environment in which they live.

Action can be taken both through individual psychotherapy and group interventions (e.g. self-help groups), but the organization can also help the worker: by promoting a culture that focuses on the workers’ well-being, identifying those at risk and providing them with support.

In conclusion, the literature shows that workaholism is still an undeclared problem in our society for the above-mentioned reasons, but nevertheless widespread and growing. Thus new empirical studies are necessary to enhance our knowledge of the construct, and this new addiction should be included in the diagnostic manuals in which it is still not present.

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