Addiction to work: A critical review of the workaholism construct and recommendations for assessment

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Abstract

Workaholism was first conceptualized as a behavioral addiction featuring compulsive use and interpersonal conflict back in the early 1970s. The present paper briefly examines the empirical and theoretical literature over the past four decades. In relation to the conceptualization and measurement, it is highlighted how the concept of workaholism has suffered from using dimensions based on anecdotal evidence, ad-hoc measures with weak theoretical foundation, and poor factorial validity of multidimensional conceptualizations. The benefits of building upon the addiction literature to conceptualize workaholism are presented (including the only instrument that has used core addiction criteria – the Bergen Work Addiction Scale). Problems estimating accurate prevalence estimates of work addiction are also presented. Finally, individual and socio-cultural risk factors, and the negative consequences of workaholism from the addiction perspective are discussed (depression, burnout, poor health, life dissatisfaction, family/relationship problems). The paper concludes by summarizing how current research can be used to evaluate workaholism by psychiatric-mental health nurses in clinical practice, including primary care and mental health settings.

Workaholism: What is it and why should we care

The term ‘workaholism’ was first used by Oates (1971) to highlight the similar cognitive-behavioral pattern that excessive and problematic work shared with alcoholism, a well-established substance-based addiction. Oates (1971) described workaholism as a “compulsion or uncontrollable need to work incessantly” (p.11). Following this seminal work, the addiction perspective was mostly abandoned in favor of adopting either an obsessive compulsive trait-based approach (Schaufeli et al., 2009ab) and/or a multi-faceted perspective including some of the following factors: the quantification of the behavior (i.e., time spent working [Mosier, 1983]), motives and related attitudes (i.e., work enjoyment, job involvement [Spence & Robbins, 1992]), abilities (i.e., ability to delegate [Robinson, 1999]) and personality traits (e.g., self-worth [Robinson 1999]).

The adoption of this multidimensional approach can be seen in some of the definitions of workaholism. For instance, MacMillan, O'Riscoll and Burke (2003) defined workaholism as "the difficulty to disengage from work, a strong drive to work, intense enjoyment and a differing use of leisure time than others" (p.167). Unfortunately, these multi-faceted conceptualizations of workaholism such as the workaholism triad of work involvement, drive, and enjoyment of work (Spence & Robbins, 1992) often lacked strong theoretical justification and have received little empirical support. Regardless of the debates in the literature, empirical evidence supports the assertion that some individuals struggle with problems of compulsive working and experience conflict in their lives as a result. Furthermore, in Westernized societies where individuals are increasingly subject to work intensification and 24/7 online connectivity, workaholism is likely to become even more prevalent (Ng et al., 2007). Thus, clinicians and other stakeholder groups (such as managers and human resources personnel), need reliable tools and guides that help them identify individuals that are suffering from this problem and to give them adequate support.

Recently, it has been argued that a robust theoretically-driven conceptualization of workaholism is possible by going back to the original addiction conceptualization of Oates, and building on the strong body of knowledge of behavioral addictions to conceptualize workaholism (Andreassen, Griffiths, Hetland, Kravina, Jensen, & Pallesen, 2014; Sussman , Lisha, & Griffiths, 2011). However, before moving on to discuss the addiction perspective and assessment, the most widely used conceptualizations and assessments of workaholism are briefly evaluated.

An overview of workaholism conceptualization and assessment

Workaholism battery (WorkBat scale)

The most extensively used instrument in the field has arguably been the Workaholism Battery (WorkBat) scale developed by Spence and Robbins (1992). Based on their review of existing literature at the time, the authors conceptualized workaholism as a trait-based multidimensional construct comprising enjoyment, drive and work involvement. The original instrument comprised twenty-five items distributed across three subscales. The inclusion of enjoyment led Spence and Robbins (1992) to distinguish between enthusiastic and non-enthusiastic workaholics. This latter group were viewed as the 'real workaholics' who like enthusiastic workaholics have high levels of involvement and drive but who report low

enjoyment from the work they do. Similarly, Ng, Sorensen and Feldman (2007) conceptualized workaholism in terms of cognitive (i.e. thinking obsessively about work), behavioral (i.e., work salience and conflict) and affective dimensions. The latter included the enjoyment facet, although here the authors stressed that this referred to the actual process of working, not the content of work.

Although Spence and Robbins' conceptualization including enjoyment has been widely used in the field (e.g., MacMillan et al., 2003), empirical evidence started to accumulate on the more negative side of excessive work investment (e.g., Griffiths, 2011; Robinson, 2013; Schaufeli et al., 2009a; 2009b). This resulted in agreement to drop the term "workaholic" when work involvement was associated with enjoyment, and to alternatively use the term "engaged" (Taris, Schaufeli & Shimazu, 2011; Mudrack, 2006). In addition to this, empirical studies have failed to confirm the three dimensional structure of the 25-item scale, with the work involvement sub-scale exhibiting particularly poor psychometric qualities (McMillan, Brady, O'Driscoll, & Marsh, 2002). Furthermore, it has been argued that involvement could in fact be omitted for the sake of parsimony as this is already captured by the other two factors which has informed the revised WorkBat scale by McMillan et al. (2002).

Work Addiction Work Test

The Work Addiction Risk Test (WART) scale is perhaps the second most widely used assessment of workaholism. Building primarily on the experiences of clinicians treating workaholics, Robinson (1999) developed the 25-item scale comprising five sub-scales: (i) compulsive tendencies; (ii) control; (iii) impaired communication/self-absorption; (iv) inability to delegate; and (v) self-worth. Subsequent studies that psychometrically tested the WART have consistently failed to support the existence of five components, with studies typically reporting between three and five factors. Also, in spite of the multidimensional conceptualization, the authors' scoring method to 'diagnose' workaholism is performed as a single factor scale (Andreassen, 2014). More contemporary empirical studies suggest that only 'compulsive tendencies' and 'control' are the key dimensions that discriminate between workaholics and non-workaholics (Flowers & Robinson, 2002). This and the relatively high correlations with general anxiety and Type A personality have either deterred authors from using this instrument as indicative of workaholism or has led them to use the first two sub-scales only (Andreassen, 2014).

Dutch Work Addiction Scale (DUWAS)

Another popular assessment of workaholism is the Dutch Work Addiction Scale (DUWAS) (Schaufeli, Bakker, van der Heijden, & Prins, 2009a; Schaufeli, Shimazu & Taris, 2009b). The authors conceptualized workaholism as a relatively stable trait within the obsessive-compulsive realm and comprised two dimensions: working excessively (i.e., working too hard) and working compulsively (i.e., the inner drive to work incessantly). Unlike previous conceptualizations, the authors asserted that their proposed two-dimensional conceptualization reflected Oates' (1971) original definition. However, the actual operationalization of the scale built on items contained in the WART and WorkBat. Working compulsively is assessed with the 'Drive' sub-scale from WorkBat; and working excessively is assessed with the 'compulsive tendency' sub-scale from WART. Importantly, in spite of the 'compulsive' label of the original scale; Schaufeli Schaufeli, Taris, & Bakker (2006) found that only two out of the nine items assessed compulsive tendencies (i.e., 'I feel guilty when I am not working on something' and 'It is hard for me to relax when I am not working') whereas the majority of items assessed excessive work. Furthermore, factor analysis demonstrated that these particular items loaded best on the 'compulsive working' dimension, hence the authors recommended that these items be included in that dimension (Schaufeli et al., 2006)[1].

Although Schaufeli et al. (2009ab) argue that their model captures the original definition of workaholism, the diagnosis of workaholism is dependent upon high scores in both working excessively and compulsively. Current thinking in this field rejects the notion that excessive behavior is necessarily a key component of addiction. Excessive engagement in a specific behavior is positively correlated with addiction but cannot be used as key indicator of addiction (Griffiths, 2011). Studies examining the motivational dispositions of workaholism have found that working excessively is not related to controlled motivation, which is a commonly cited antecedent of the key compulsive element of workaholism (Van den Broeck et al., 2011). In addition to this, the excessive working scale has shown marginal internal consistency in some studies (Sussman, Arpawong, Sun, Tsai, Rohrbach, Sprutjt-Metz, 2014). Although returning to the original addiction perspective, the authors did not build on the accumulated evidence in this field, and together with the discussed issues, it limits the direct applicability of this tool for diagnosis in clinical practice.

[1] Nonetheless, subsequent research into the extended scale (e.g., Líbano, Llorens, Salanova & Schaufeli, 2010) still show one of the items (item 17) as a component of working excessively instead of working compulsively, which may lead to confusion among those using Schaufeli's two-dimensional conceptualization.

There are other workaholism assessment scales but there has been little in the way of psychometric validation (e.g., the trait measure that assesses overlap with obsessive compulsive personality disorder, the Schedule for Non Adaptive Personality [SNAP-Work]: Clark, McEwen,Collard & Hickok, 1993; or the behavioral based instrument developed Mudrack & Naughton, 2001). Although the tools discussed above have broadly assisted the field in differentiating between people that may be at risk of suffering negative consequences from those who may just be highly engaged with work (and therefore less at risk), they have also included additional elements which from an addiction perspective have failed to be theoretically justified. Enjoying work has been recently conceptualized as an independent phenomenon that does not suit traditional addiction conceptualizations. Excessive behavior does not qualify as a key dimension of addiction on its own (Griffiths, 2011).

Furthermore, the various suggestions of multidimensionality have either not received empirical support about the number and type of dimensions proposed (i.e., from one-dimensional to multi-faceted, from an addiction, to a personality trait, to an attitude), or have shown poor psychometric qualities (e.g., working excessively from the DUWAS, or work involvement from the WorkBat). There has been very little effort to examine convergent and discriminant validity between these multiple measures. Critiques, such as those by Andreassen (2014) and Ng et al. (2007), argue that these different instruments have been driven empirically rather than theoretically. Consequently, there could well be lack of convergent validity amongst the instruments developed. Therefore, a psychometrically valid and reliable diagnostic tool has been called for in order to understand the prevalence and impact of workaholism and help in the development of targeted interventions.

Syndrome Based Model of Workaholism

Since workaholism was first framed as a behavioral addiction, and given the accumulated empirical evidence from within the addictions field (both behavioral and substance-based) supporting a syndrome-based model of addictions regardless of the object of addiction (Shaffer et al., 2004), a number of researchers have been persuaded that such addiction literature could help advance the understanding of the key components of workaholism. More broadly, the syndrome-based model of addiction suggests that similar underlying mechanisms operate regardless of the object of addiction, and that manifestations of the syndrome will be both generic and unique to the specific addiction. Similar underlying vulnerabilities may be operating along with more unique psychosocial variables that predispose the individual to interact with a particular object of addiction and no other.

Increasing research evidence in the field is supportive of such a model. Thus, for instance, self-report multi-addiction survey studies have found strong correlation amongst different behavioral and substance addictions (Villella et al., 2011). Furthermore, an increasing number of studies report both chemical and behavioral addictions share similar course, history, and neurobiological correlates (Orford, 2001; Grant, Potenza, Weinstei & Gorelick, 2010; Griffiths, 2005). In relation to the similarity in history of drug and behavioral addictions, Carroll and Robinson (2011) found that undergraduate students who were children of alcoholics or workaholics were both more likely to adopt such behaviors from their parents earlier in their lives compared to the other students, and they both reported their parents' workaholism or alcoholism as the reason for them to do so. Perhaps the most compelling evidence comes from neurological studies, as these support the hypothesis that reward circuits in the brain are involved in both substance and non-substance based addictions, both share similar genetic vulnerability and clinical features, and that they develop following a similar pattern (i.e., initial arousal before the act, pleasure/high relief linked to the act, lowered arousal afterwards along with guilt, withdrawal and potential tolerance) (Villella et al., 2011; Grant et al, 2011).

Back to basics: Using addiction literature to theorize about workaholism

Oates' original conceptualization of workaholism reflected a pure addiction perspective in terms of both the compulsion to work and the degree of conflict with one's life:

> "A workaholic is a person whose need for work has become so excessive that it creates noticeable disturbance or interference with his bodily health, personal happiness, and interpersonal relations, and with his smooth social functioning" (Oates, 1971; p. 4) .

Two highly influential models in our understanding of behavioral addictions are the *syndrome model of addiction* (Shaffer et al., 2004) and the *component model of addiction* (Griffiths, 2005). Whereas the former has been most helpful in understanding antecedents and vulnerability, the latter provides a framework upon which the key underlying features of addiction can be understood. The components model draws on Brown's (1993) *hedonic management model* and has been largely inspired by the diagnostic classification of pathological gambling in the DSM-IV (APA, 2000). According to this framework, an addict

displays symptoms that represent each of the following components: *cognitive and/or behavioral salience* (i.e., the activity dominates one's thoughts and/or behavior), *mood modification* (i.e., the behavior is used as a way to modify mood), *tolerance* (i.e., the increasing amount of time required to obtain the same experience with the activity), *withdrawal symptoms* (i.e., feeling negative emotions when the activity is stopped or diminished), *relapse and reinstatement, and loss of control* (i.e., the need to return to the same level of use after trying to stop, and losing control over the use), and *conflict* (i.e., the behavior conflicts with everything in the person's life such as relationships, job, and/or education) (Brown, 1993; Griffiths, 2005).

Bergen Work Addiction Scale (BWAS)

This model has been validated in a variety of substance and non-substance based addictions and has been widely used to develop tools to understand and assess prevalence across a number of different addictions such as gaming addiction (e.g., Griffiths, 2002), exercise addiction (e.g., Allegre et al., 2006), internet addiction (Widyanto & Griffiths, 2006), and more recently social networking addiction (Andraessen, Tosheim, BrunBerg & Pallesen, 2012). Building on these findings, Andreassen, Griffiths, Hetland and Pallesen (2012) developed the Bergen Work Addiction Scale. The scale comprises seven items tapping into each of the aforementioned components, and each item is scored on a Likert scale from 'never' to 'always'. Individuals are operationally classified as workaholics if they endorse four or more out of seven items (i.e., scoring 'often' or 'always'). Although still in relative infancy, it has already been validated in Norwegian samples of over 12,000 people, and has a one-dimensional structure and high Cronbach' alphas in the range of .80-.85. Convergent and discriminant validity analysis suggest that BWAS converges well with existing workaholism scales tapping the compulsive element (r=.50-.84), although the correlation with the compulsive tendencies subscale was high to warrant attention of potential duplication. The correlation with the WorkBat Enjoyment sub-scale was low (.13) supporting the view that engagement and workaholism are two different constructs (van Beek, Taris, & Schaufeli, 2011).

Given the strong conceptual foundation, the brevity of the scale (favoring its use for prevalence studies or for screening within the workplace), and considering that its operationalization enables the integration of this behavior with potential co-occurring addictions, the BWAS is a promising tool to advance our understanding of workaholism.

However, users should be aware that considering how recently it was developed, it still needs further cross-cultural validation.

Insert tables 1 and 2 here

Prevalence of Workaholism

The scarcity of studies, together with the different methods to assess workaholism and the limited representative sampling techniques, do not allow the reporting of accurate prevalence estimates. Similarly to other behavioral addictions, early approaches in examining prevalence of workaholism were concerned with assessing excessive amount of behavior either measured in number of hours (as a proxy for workaholism), or directly asking individuals about their perceptions. For instance, Matushka (2010) reported that in a national Canadian survey in 2005, one-third of the working age population self-diagnosed as workaholics. Extrapolating these figures to the American population in employment age and among those actually employed, Sussman (2012) estimated an approximate estimate of 18% prevalence of workaholism. However, the ad-hoc self-report measure used in the Canadian study raises questions about the accuracy of prevalence figures. A study conducted by Burke and Ng (2006) comparing self-reports of workaholism with colleagues' reports of workaholic behavior were highly similar.

A more sophisticated method of prevalence estimation is the multi-addiction matrix. This consists of providing a rigorous definition of addiction and evaluating the extent to which respondents feel they are addicted to one or more of the objects typically including behaviors such as sex, relationships, work and psychoactive substances (e.g., Cook, 1987; Sussman et al., 2011; 2014). Cook was a pioneer in this matrix method when he developed the Problem History Questionnaire (PHQ) that built upon Peele's (1985) conceptualization of addiction. In the development study with college students, work addiction was one of the most prevalent addictions (17.5%). Building upon matrix methods, Sussman et al. (2014) examined the prevalence of multiple addictions in alternative high school students that had been part of a drug abuse prevention program three years prior to data collection. The authors found that 20% of the respondents reported having ever being addicted to work. The figures were slightly lower when respondents were asked about the past thirty days (15.6%). Although this was a young 'at-risk' sample, that reported significantly higher than normal levels of substance-based addictions, the difference with general adult population in relation

to this particular addiction within a 12-month period did not differ significantly from large adult samples from Canada where work and eating were the most prevalent behavioral addictions (Konkoly Thege et al., 2015).

Unlike these ad-hoc instruments, most of the 16 addictive behaviors subscales included in the Short PROMIS Questionnaire (SPQ) (Christo, Jones, Haylett, 2003) have been validated in clinical samples. Using this instrument, MacLaren and Best (2010) reported 12.4% prevalence of work addiction amongst university students. However, the work addiction sub-scale from SPQ was one of the sub-scales that did not have any criterion validity. In students, Villella et al. (2011) reported a more conservative figure of 8.5% workaholics among a high school sample using the WART. It should be noted that assessing work addiction in students arguably lacks face validity, as the majority are not in full-time employment.

Giving the variety of prevalence figures and methods used, Sussman, Lisha and Griffiths' (2011) meta-analysis roughly estimated a middle point of approximately 10% addicted to work. Prevalence figures have also been investigated separately for different occupational groups, as there are studies suggesting this can be more prevalent in particular occupations. For instance, using the WorkBat, Burke (2000) found 16% of workaholics in a sample of professional managers (i.e. those with high drive, low enjoyment, high involvement). Psychologists, medical doctors and lawyers are also occupations reporting high levels of workaholism of up to 23% (e.g., Doerfler & Kammer, 1986). It should be highlighted that until authors define and assess work addiction in a consistent way using widely validated instruments, any prevalence estimate can only offer an approximation to the real size of the problem. Overcoming these limitations, Andreassen, Griffiths, Hetland, Kravina, Jensen and Pallesen (2014b) conducted the first ever nationally representative prevalence study amongst adult Norwegian employees (n=1,124) using the BWAS. The authors reported a work addiction prevalence rate of 8.3% with the most highly endorsed components of the multicomponent model of addiction being tolerance, conflict, and withdrawal.

Who is at Risk?

The lack of agreement among scholars about the nature and true dimensions of workaholism limits the ability to accurately identify potential risk factors. In the absence of

longitudinal studies, differentiating between antecedents and consequences rather than correlates is often a matter of theoretical elaboration, often extrapolating evidence from related areas of research. From a classical learning theory perspective, the increased risk of workaholism would be in the contingency between work behavior and external reinforcement that could be both positive (e.g., meaningful rewards administered if the behavior of working hard is executed) or negative (e.g., engaging in the behavior frees one from engaging in unwanted alternative behaviors [e.g., spending time with a partner in the context of an unhappy relationship]). However, this theory is built on the assumption that we are externally controlled by reinforcers and gives little room for individual dispositional variables. Learning theory clashes with the seemingly stable nature of workaholism across the lifespan, and studies have demonstrated strong links between workaholism and personality traits (e.g., Spence & Robbinson, 1992; Andreasssen et al., 2014b).

Nowadays, it is accepted that a combination of individual dispositions (e.g., biological/genetic pre-dispositions, personality traits) together with specific beliefs and values resulting from the interaction between one's predisposition and the socio-cultural and organizational environment, contribute to the development of work addiction (e.g., Ng, Sorensen & Feldman, 2007). From a personality trait perspective, at-risk individuals may exhibit a combination of compulsivity, obsessiveness, perfectionism (at the simplest level) and to neuroticism and conscientiousness at a higher order level (Stooeber, Davis, & Townley, 2013; Spence & Robbins, 1992). Need for achievement has been regarded as a strong predictor of workaholism (Ng et al., 2007). Feelings of low self-worth have been identified as drivers of workaholism as employees can use work as a means to address these negative feelings (Mudrack, 2006, Ng et al., 2007).

From a cognitive psychology perspective, values such as achievement and self-direction are particularly relevant to understand workaholism. Individuals who strongly uphold these values want to be successful and influential, which results in them working excessively to behave in consonance with their values (Ng et al., 2007). Within the cognitive perspective (and from a more pathological perspective) it has been argued that problematic core beliefs about the self, lead to assumptions about the cause of those beliefs and automatic thoughts (e.g., low self esteem→working will make me feel better→I will work hard) (MacMillan et al., 2003).

Individual motives have also been explored as antecedents of workaholism, and in particular Self-Determination Theory has been used to explore these relationships (Van Beek et al., 2011; 2012). Self-determination theory broadly distinguishes between behavior that is autonomously motivated and behavior that is externally controlled (Ryan & Deci, 2000). Early studies suggested that work-related rewards (i.e., externally controlled motivators) can be essential motivators for workaholics (Spence & Robbins, 1992). More recently, attention has been paid to a less obvious type of controlled motivation labelled "introjected regulation." This results from partially internalizing external standards of social approval and self-worth, hence the standards have been internalized but individuals do not fully identify with them, and can be at odds with other personal values (Ryan & Deci, 2000). Van Beeck et al. (2011, 2012) found that this particular type of motivation, and not just the purely externally controlled motivation, was a key predictor of workaholism. Stoerber, David and Town (2013) found that introjected regulation was a strong predictor of workaholism and that this variable appeared to fully explain the impact of the perfectionism personality trait upon workaholism. In this sense, the workaholic does not engage in the behavior to enjoy it, but for the instrumental value that it has. Meeting the external standards helps workaholics improve their self-worth, and failing to do so, results in negative feelings deeply connected to the self, such as shame and guilt (Killinger, 2006).

Researchers have examined beliefs and values that incorporate the influence of the socio-cultural environment and that are acquired in the socialization process. In this sense, highly demanding families might bring up their children reinforcing the values of effort and discipline from very early in life. This is done via a combination of operant conditioning and vicarious learning mechanisms. Indirect support for this was found in a study that examined the children of workaholics (Carroll & Robinson, 2000). The authors found that these children adopted their parents' workaholic values and behaviors and involving higher degree of responsibility compared to children of non-workaholic parents. Later in life, professional rules (whether implicit or explicit); along with those of the organizations in which individuals work, may play a key role in feeding the thirst for working compulsively (e.g., long-working hour cultures, tangible and intangible rewards). In a large study of professional and managerial jobs, Burke (2001) found that workaholics were more likely to work in organizations that had more work-personal imbalance practices (e.g., travelling to and from the workplace during weekends, lack of limits relating to hours spent at work) compared to

non-workaholics. Living in a modern 24/7 connectivity society, technology provides the best and the worst excuses for those with individual predispositions to materialize their urges.

Although there is still much work to be done in this area, an understanding of how these different variables contribute to developing workaholism will help psychiatric-mental health nurses and other relevant stakeholders (e.g., managers, human resource personnel) to design prevention and relapse strategies whilst living within a context of increased job intensification partly supported by technological advance.

Consequences of Workaholism

Given that most studies carried out in the work addiction field rely on cross-sectional designs, the classification of covariates as antecedents and/or consequences has strong methodological limitations. Perhaps a more sensible approach could be to identify correlates that should be considered simultaneously when evaluating how workaholism is affecting (or could affect) someone's life and that of their family and close friends. It is important to note that workaholism is sometimes confused with work engagement, resulting in the attribution of positive consequences to work addiction (Van Beek et al., 2012). This is misleading, as those individuals who experience conflict in their lives due to recurrent workaholic behavior have lower productivity levels, experience chronic stress, and are far more likely to be absent from work and have longer illness periods (Andreassen et al., 2014a, Sussman, 2012). Ng et al (2007) suggest that differentiating between short-term gains and long-term costs could be useful to understand the mixed outcomes that workaholics may experience.

Studying workaholism from the addiction perspective results in a number of specific negative consequences, most notably loss of control, withdrawal, conflict, and behavioral salience. Beyond this, workaholism has been consistently associated with burnout (Innanen et al., 2014; Schaufeli, et al., 2009c). In fact, De Carlo et al. (2014) found that workaholism mediated the relationship between regulatory focus (i.e., motivational dispositions) and burnout. Workaholism has also been associated with depression, (e.g., Carroll & Robinson, 2000), poorer physical health (e.g., Ng, Sorensen, & Feldman, 2007); career and life dissatisfaction (e.g., Bonebright, 2000), work-family conflict (Shimazu et al., 2011; Matuska, 2010; Bonebright, 2000), and higher level of conflict in their relationships and marital problems (e.g., Robinson, Carroll, & Flowers, 2001). In a time series study, a more sophisticated design to assess consequences than the more frequently used cross-sectional

surveys, Bakker et al. (2013) confirmed that working during the evening was more harmful in terms of wellbeing for workaholics than for non-workaholics.

Co-Occurring Addictions

In addition to theoretically driven consequences, and given the addiction origins of the workaholism concept, researchers have become increasingly interested in the study of behaviors that co-occur with workaholism such as substance-based addictions, as this can lead to the adopting of a more holistic approach to prevent and treat such problems effectively (Shaffer et al., 2004). The syndrome model of addiction hypothesizes that individuals who develop an addiction (behavioral or chemical) experience an alteration of their reward system that increases their likelihood of developing new ones in relation to objects that they are frequently exposed to (Shaffer et al., 2004). For instance, coffee, which can be found at work and at home, can aid alertness and productivity. Workaholism and coffee drinking often co-occur, and when they do, are likely to reinforce each other (Porter & Kakabadse, 2006).

Giving the few studies estimating the prevalence of workaholism, co-occurrence studies are even harder to find. In 1991, Carnes (1991) examined other addictions in a large sample of sex addicts and claimed that 23% were also work addicts. The meta-analysis conducted by Sussman, Lisha, and Griffiths (2011) in US adult populations reported an estimated 47% of the American population experience an addiction to one of eleven substance and behaviors including work over a 12-month period. The degree of co-occurrence between two or more of those addictions was estimated at 23% (i.e., cigarettes, alcohol, hard drugs and the behavioral included eating, gambling internet, shopping, love, sex, exercise and work). In particular, they reported a 20% degree of co-occurrence between workaholism and other addictions, however whether this is higher for some of these addictions than for others is unknown.

It has been argued that the type of behavioral addiction that individuals are likely to develop following a previous one can be predicted from the individuals' lifestyles (Sussman et al. 2011: 2012). Since work and technology are often intertwined, and work is reliant on the use of technology, co-occurrence of these two phenomena has been the focus of recent empirical studies. Porter and Kakakbadse (2006) conducted a qualitative study with IT professionals and concluded that work addiction and Internet addiction mutually reinforced

each other. This reinforcing mechanism was later examined in a quantitative two-wave study by Quinones, Griffiths and Kakabadse (2015) who found that it was Internet addiction that appeared to be the antecedent for work addiction. The authors tentatively explained this result building on Carnes et al.'s (2005) model of addiction via the 'masking mechanism' (2005, p. 94) This mechanism describes how individuals engage in a more socially acceptable addiction (i.e., workaholism, a socially rewarded addiction) as a strategy to hide or cover an addiction that is less socially acceptable (e.g., internet addiction, a non-socially rewarded addiction). Although the study was not truly longitudinal, it nonetheless could contribute to the development of more rigorous studies capable of exploring co-occurrence in a more systematic way.

Implications for Diagnosis of Workaholism in Psychiatric-mental Health Nursing Practice

Although the field is still in development, individuals who experience workaholism need to be appropriately supported. There have been some suggestions to assess workaholism within clinical practice. Robinson (1998) cited ten signs to watch out for: (i) hurrying and staying busy, (ii) need to control, (iii) perfectionism, (iv) difficulty with relationships, (v) work binges, (vi) difficulty relaxing and having fun, (vii) memory losses of conversations or trips to and from a destination because of exhaustion and mental preoccupation with planning and work effects of tuning out the present, (viii) impatience and irritability, (ix) self-inadequacy, and (x) self-neglect.

These ten signs highlight some of the important aspects to be considered when examining workaholism but they do not provide any norms for diagnosis, nor do they suggest how many and in what combination these signs suggest potential workaholism. As argued throughout this paper, the addiction literature provides the most promising framework from which to study workaholism. In view of this, the authors suggest that the BWAS (Andreassen et al., 2014) is used as a tool to help psychiatric-mental health nurses to identify individuals who might struggle with work addiction in addition to other problems, or as the main cause of their discomfort. Below, the advantages and disadvantages of the scale are summarized so that psychiatric-mental health nurses (and other stakeholders such as managers and human resources personnel) understand the contribution of the tool to their practice.

The BWAS: Nursing Assessment of Work Addiction

The advantages of the BWAS are that the tool: (i) is rooted in addiction theory as opposed to dimensions shown to have poor validity, (ii) is unidimensional (although multidimensional scales have been developed, empirical evidence justifying these is often scarce and theoretically unsupported), (iii) has clear cut off points aligned with other psychiatric measures, (iv) validated using two large samples, and (v) has good specificity (the 4 out of 7 cut off point differentiates well between workaholics and non-workaholics based on the number of hours and subjective health complaints). However, it should be used with caution on the understanding that: (i) there is no gold standard against to evaluate the cut-off point so there is a potential risk to over-diagnose (although it is important to highlight that other diagnostic tools use less stringent criteria [typically 5 out of 10]), (ii) work addiction has not yet been recognized as a psychiatric disorder so even if the instrument is used to identify the problem, this should never be equated with a psychopathology in strict psychiatric terms, and (iii) still requires further validation studies in different countries (see Table 2).

Conclusions

This paper attempted to briefly examine the history of workaholism and argue that the best way to understand potential problems is from a behavioral addiction perspective. Workaholism is a serious issue and can lead to both physical and psychological problems for the individual (e.g., depression, burnout, poor health, life dissatisfaction, family/relationship problems) as well as negatively impacting on the organization that the individual works for (work absence, loss of productivity, etc.). Workaholism is a multifaceted behavior that is strongly influenced by individual, contextual and structural factors (including involvement and motivation, job design, and the temporal nature of addictive work behaviour). It should be reiterated that excessive working does not necessarily mean that a person is addicted to work, and although all genuine work addicts work excessively, not all excessive workers are addicted (Griffiths, 2011). The key issue for psychiatric-mental health nurses is whether excessive working is prolonged and to what extent excessive working impacts negatively and detrimentally on other areas of the worker's life. Nurses will need to assess for both behavioral and chemical addictions in both primary care and psychiatric-mental health clinical settings. The nurse can inquire into work habits when clients present with cardiac, autoimmune conditions, and upon suspicion that symptoms disclosed by clients may have an underlying work addiction. Like in chemical addictions, clients may be ashamed to bring up

the issue unless specifically asked about their stressors, symptoms, and work addiction behaviors that are assessed through a variety of instruments.

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Table 1 Main Instruments to Measure Workaholsim and evaluation of adequacy for clinical practice

ISSUE	WorkBAT (Spence & Robbins, 1992)	WART (Robinson, 1999)	DUWAS (Schaufeli et al., 2009ab)	BWAS (Andreassen et al., 2012)
INITIAL DIMENSIONS	**Drive** Enjoyment of Work Work involvement	**Control and compulsive tendencies** Impaired communication/absorption Inability to delegate Self-worth	**Working excessively** *(adapted from the Control subscale WART and validated as a short measure of WART)* **Working compulsively** *(adapted from the Drive subscale from WorkBAT)*	Loss of control Conflict Withdrawal Cognitive/behavioral salience Mood modification Tolerance Relapse
LIMITATIONS	Factor analysis revealed that work involvement failed to confirm the three dimension and suggest that dropping the work involvement factor works best (Kanai, Wakabayshi, & Fling, 1996;McMillan, Brady, O'Driscoll, & Marsh, 2002)	The first three dimensions are the only that differentiate between workaholics and non-workaholics; compulsive tendencies is the key dimension. Criticisms about the lack of fit with current definitions of workaholism	The labelling of working excessively leads to confusion with "quantity of work" and in line with other behavioural addictions, disagreement exists as to whether amount of time is a key variable	Validated with self-selected samples Too high correlation between this and the compulsive tendencies (WART)-are they different constructs?

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ADEQUACY OF USE IN CLINICAL PRACTISE	Current conceptualizations of workaholism have gone back to the original definition and therefore reject the component of enjoyment. Thus, only drive scale is suitable		Cut off points: Work addict when they have a high score on WE as well as on WC (or on the combined WC+WE scale) i.e., when their score > 75th percentile (Mostly Normative Dutch sample)	Cut off points: 4 out of 7 items endorsed (i.e. endorse means selecting almost always or always) Good convergence with mainstream workaholism scales WORKBAT, WART (if only too high with WORKBAT) Although recently created ties directly into a stablished model of addictions This enables comparison with other behavioural addictions (useful as high co-occurrence of addictions)

Table 2 The Bergen Work Addiction Scale (BWAS) (Andreassen et al., 2012)

Instructions: Below you find seven questions related to your work/job. Answer each of the seven questions by selecting the one response alternative (ranging from ''never'' to ''always'') for each question that best describes you.

How often during the last year have you …

Items	Addiction component
1.Thought of how you could free up more time to work?	Salience
2.Spent much more time working than initially intended?	Tolerance
3.Worked in order to reduce feelings of guilt, anxiety, helplessness and depression?	Mood modification
4.Been told by others to cut down on work without listening to them?	Relapse
5.Become stressed if you have been prohibited from working?	Withdrawal
6.Deprioritized hobbies, leisure activities, and exercise because of your work?	Conflict
7.Worked so much that it has negatively influenced your health?	Problems

Notes: All items are scored along the following scale: "never"=1, "rarely"=2, "sometimes"=3, "often"=4, "always"=5