

## Seeing the forest through different trees: A social psychological perspective of work addiction

*Commentary on: Ten myths about work addiction (Griffiths et al., 2018)*

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(Received: July 2, 2018; revised manuscript received: November 16, 2018; accepted: November 17, 2018)

We live in exciting times for the scientific study of work addiction, given its increased relevance and the diverse perspectives one might take to approach this phenomenon. Simultaneously, this field does not appear to be unified as a result of several misleading myths, which are addressed by the debate paper of Griffiths et al. (2018). In response, we would like to complement this study by proposing that the construct of interest should be more precisely identified in the context of related constructs and that an integrative framework should be applied, which is able to take into account not just the micro-level characteristics (i.e., individual differences), but meso- (i.e., environmental factors) and macro-level (i.e., societal factors) ones as well.

**Keywords:** integrative model, personality, situational factors, societal factors, work addiction, workaholism

### INTRODUCTION

We welcome the debate paper of Griffiths, Demetrovics, and Atroszko (2018) in which they address key myths and issues related to the scientific study of work addiction (WA). In the following commentary, we would like to contribute to this discussion by proposing an integrative model (Figure 1) that reflects on several of the myths highlighted by Griffiths et al. (2018). In doing so, the conceptual similarities and dissimilarities are discussed between WA and several related constructs as this initial step of precise conceptualization is needed if we wished to better understand WA. Subsequently, several points addressed by Griffiths et al. (2018) are expanded to demonstrate the potential fruitfulness of seeing the forest (i.e., WA) through different trees (i.e., personality traits, norms, or economical changes).

### A CLEARER SEPARATION OF SIMILAR CONSTRUCTS

Psychological research is sometimes characterized by overlapping constructs. As highlighted by Griffiths et al. (2018), these questions permeate the field of behavioral addictions with the simultaneous presence of similar, yet different constructs, such as WA, workaholism (Spence & Robbins, 1992), passion for work (Vallerand, 2015), and work engagement (Bakker, Schaufeli, Leiter, & Taris, 2008). While Griffiths et al. (2018) explicitly distinguished WA

and workaholism (Myth 4), the presence of the other constructs could also cause confusion to researchers; fortunately, there have been some studies that addressed these questions.

First of all, Birkeland and Buch (2015) and Vallerand (2015; Curran, Hill, Appleton, Vallerand, & Standage, 2015) compared passion, workaholism, and engagement to one another and highlighted some important theoretical distinctions between the three constructs. With regard to passion and workaholism, it is worth noting that workaholics do not necessarily like, love, or enjoy the work that they are doing. In addition, the Dualistic Model of Passion (Vallerand, 2015) states that when one is passionate for work, this activity is part of one's identity and it is perceived as being meaningful and valuable for the individual. However, this is not the case for WA. While passion is a dual concept that differentiates between the positive harmonious passion and the negative obsessive passion, WA is found predominantly negative by scientific research. Rather high correlations have been observed between different problematic behaviors and obsessive passion (e.g., Orosz, Vallerand, Bóthe, Tóth-Király, & Paskuj, 2016; Wang & Chu, 2007), suggesting that there might be fine-grained differences between the two constructs that is worth future investigations.

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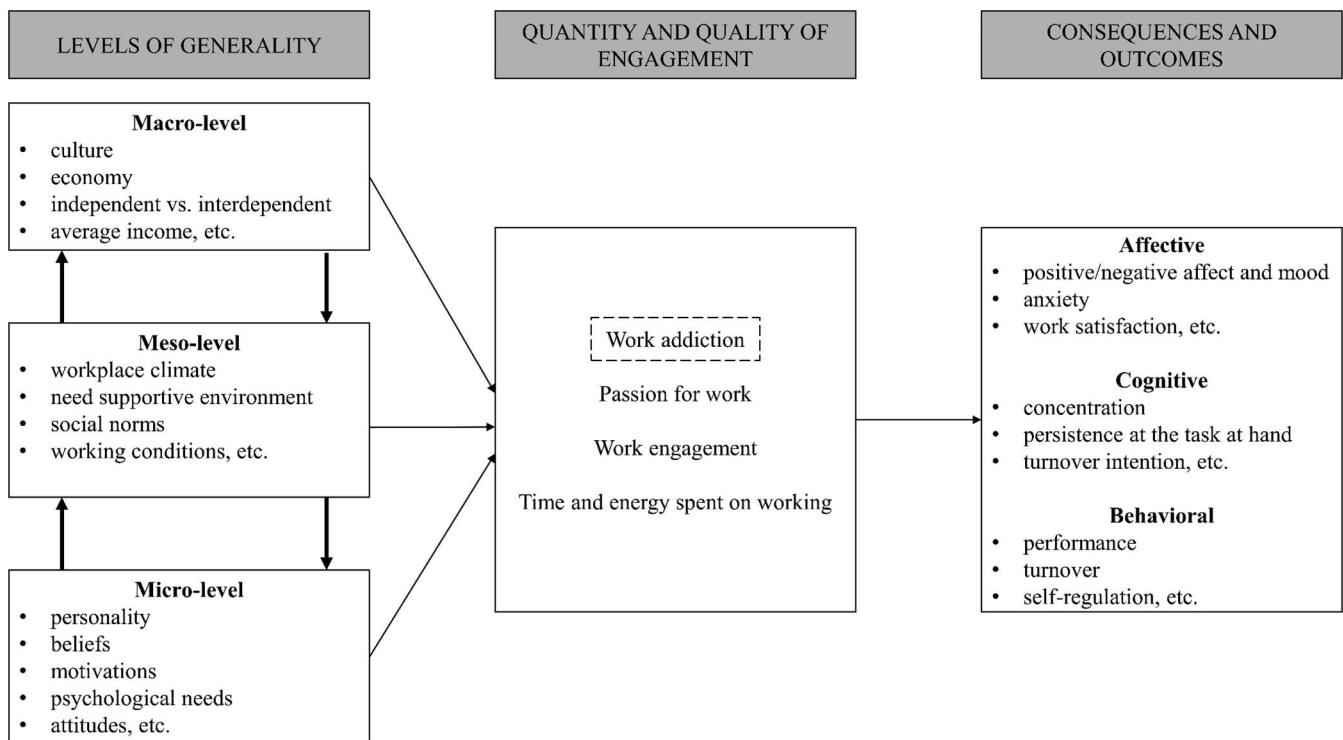


Figure 1. The proposed integrative model

One potential difference between WA and other related construct might be the attitude toward work. Attitudes are positive (“I like my job”) or negative (“I hate my job”) personal evaluations toward a particular object. The detailed examination of these attitudes could reveal whether individuals who are addicted to work have positive attitudes toward certain aspects of work (e.g., “I like working together with inspiring colleagues”), but negative attitudes toward other aspects (e.g., “I hate doing the administrative parts of my job”). The positive aspects of work might be rewarding and might even strengthen WA. Such research could help not only in the distinction between obsessive passion and WA, but also can provide insights about the dynamics of WA development and maintenance. Moreover, the natural course of WA should be identified, given that the addiction process typically involves a transition from voluntary engagement with a particular behavior (i.e., passion) to a more compulsive engagement (i.e., WA), in which positive or even recreational feelings transform to rather negative feelings (Brand, Young, Laier, Wöfling, & Potenza, 2016). Overall, the close inspection of the ratio of positive versus negative aspects of work attitude might be informative regarding how obsessive passion can turn into WA.

(Over)engagement and workaholism also have similarities to one another, given that both refer to heavy work investment. Empirical evidence also showed that workaholism and work engagement are only weakly and positively correlated (Schaufeli, Taris, & Bakker, 2006; Shimazu, Schaufeli, Kamiyama, & Kawakami, 2015). Gaming and TV series watching research also demonstrated that high engagement and problematic use are qualitatively different constructs (Deleuze, Long, Liu, Maurage, & Billieux, 2018; Tóth-Király, Bőthe, Tóth-Fáber, Hága, &

Orosz, 2017). Engagement is not necessarily related to negative outcomes, whereas WA is. High engagement might be interpreted as a potential precursor of addiction as it only fulfills the peripheral – instead of the core – criteria of addiction.

Finally, it has also to be reinforced that time spent with work is not a sufficient criteria of WA (Myth 9). As highlighted by Griffiths et al. (2018) and other scholars (e.g., Bőthe et al., 2018; Chak & Leung, 2004), there is often only a small-to-moderate association between time spent with the activity and behavioral addiction. Future research may focus on quantity of work from the perspective of comparing individuals with high work engagement and WA. Overall, although sharing a number of similarities, these constructs nevertheless appear to be distinct, and researchers should put more emphasis on the precise identification of the construct of their interest as the initial step of research.

#### PERSONALITY FACTORS, SITUATIONAL FACTORS, OR BOTH?

With the precise identification of the construct of interest, we should turn our attention to the investigation of relevant correlates, which may stem from three sources: micro-level, meso-level, and macro-level. Upon reviewing the literature, one can see that previous studies predominantly investigated associations between WA and *micro-level or individual variables* such as, for example, Big Five personality traits (e.g., Andreassen, Hetland, & Pallesen, 2010), obsessive-compulsive personality (Mudrack, 2004), or self-esteem (Burke, 2004) (see the meta-analytic study of Clark, Michel,

Zhdanova, Pui, & Baltes, 2016). These studies support the notion that there are some individual differences that might predispose one toward WA. Still, there is an additional micro-level characteristic that received less scientific attention from the perspective of WA: work motivations.

Motivations could also have important associations with WA by answering the simple questions of “Why do I work?” or “Why would I work hard?” (Gagné & Deci, 2005; Gagné et al., 2015). Previous studies highlighted the influential role of work motivations in relation to burnout (Fernet, Gagné, & Austin, 2010), organizational commitment (Howard, Gagné, Morin, & Forest, 2018), or job satisfaction (Howard, Gagné, Morin, & Van den Broeck, 2016). Taking the perspective of Self-Determination Theory (Ryan & Deci, 2017), a macro-theory of human motivation and development, one might work hard for the inherent enjoyment derived from the activity and others might work hard to achieve certain financial and social gains. While the relevance of motivations has been highlighted within the work setting, less scientific attention has been paid to their relations with WA. Some initial findings suggest that these motivations might not only predict WA, but they might also facilitate the separation of WA and work engagement (Stoeber, Davis, & Townley, 2013; van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012). On the whole, we believe that focusing on attitudes and motivations might shed light on WA from different perspectives.

Motivations themselves might be influenced by many factors of which task significance is particularly relevant as it refers to the subjective judgments that work has a positive effect on others (Grant et al., 2007; Hackman & Oldham, 1976). When workers believe that, through their work, they contribute to the well-being of others, they are more likely to experience their work as being meaningful and valuable, subsequently becoming more involved in work and invest additional time and energy in it (Grant, 2008). In addition, perceived social impact (i.e., own actions contribute to others' lives; Grant et al., 2007) and perceived social value (i.e., own actions are appreciated by others; Leary & Baumeister, 2000) could also contribute to overengagement with work or WA. This way, workers' basic psychological needs of autonomy, competence, and relatedness (Ryan & Deci, 2017) are also satisfied which, in turn, might further increase intrinsic work motivation.

Beyond the micro-level characteristics, *meso-level attributes or environmental factors* (e.g., workplace climate or relationship dynamics between colleagues) could also play an important role in WA. Of major interest are social norms as they play an important role in other problematic behaviors, such as heavy drinking (Neighbors, Lee, Lewis, Fossos, & Larimer, 2007), pathological Internet use (Liu, Fang, Deng, & Zhang, 2012), or problematic Facebook use (Marino et al., 2016). Workplace norms are mental representations of appropriate behaviors at the workplace. While many norms could be present in a workplace, three salient ones could be highlighted: (a) how much work is displayed in the relevant group (descriptive norms), (b) how much the relevant group approves work (prescriptive norms), and (c) information about how fellow employees behavior is changing over time (dynamic norms). Imagine that a graduate student gets a job in a company. The work group arrives at

9 a.m. and leaves at 8 p.m. (descriptive norm); his direct supervisor expects the student to work with full concentration and employees can have only short lunch breaks (prescriptive norm) and this student heard that in the past few months his immediate colleagues tend to spend more and more time with work (dynamic norm; Sparkman & Walton, 2017). In this context, the dutiful young employee who has just started the job might develop WA more easily.

Although not always in the focus of behavioral addiction research, there are some studies that support the importance of meso-level investigations, such as increased job demands (e.g., Andreassen et al., 2017), lower job resources (Molino, Bakker, & Ghislieri, 2016), competitive climate (Keller, Spurr, Baumeler, & Hirschi, 2016), managerial support (Mazzetti, Vignoli, Schaufeli, & Guglielmi, 2017), and job control (Schaufeli, Taris, & van Rhenen, 2008), which are positively related to WA. For these reasons, WA research might benefit from exploring not only the micro-level characteristics, but the work environment as well as other attributes can have differentiated effects on employees with different personality traits.

Finally, *macro-level or societal characteristics* refer to the global aspects of one's environment that might include the effects of culture, economic situation, or average income. There has been an expansion of economic activity on the globe, which makes it possible to work in other countries. Regardless of crossing actual or virtual borders, macro-level characteristics are likely to influence one's engagement with work, even if these effects are not that salient on a micro-level. For instance, one of the most common differentiations is between individualistic and collectivistic cultures (Hofstede, 2001; Hofstede, Hofstede, & Minkov, 2010). Individualistic cultures (typically Western countries) are characterized by individualistic values, such as self-fulfillment and personal autonomy; thus, the focus is on the individual. On the other hand, in collectivistic cultures (typically Eastern countries), the group is in the focus instead of the individual; thus, interdependence and the interest of the group is prioritized (which can lead to stronger effect of the norms). Although work plays an important role in everyone's lives (regardless of culture), the quality of one's life has a higher importance than economic growth in individualistic cultures relative to collectivistic ones (Hu et al., 2014). This is also reinforced by the notion that people work harder in societies where survival values are more important than self-expression values (Snir & Harpaz, 2009). Interestingly, a couple of initial studies supported these hypotheses (Hu et al., 2014; Snir & Harpaz, 2009).

## CONCLUSIONS

One last point that we would like to conclude is that the different levels in the aforementioned model do not function independently; in fact, these are likely to influence one another, akin to Vallerand's (1997) hierarchical model of motivation. Economical changes (i.e., a financial crisis) are likely to influence one's workplace (i.e., the supervisor requires the employees to work overtime), which is likely to be a fuel for the individual's characteristics toward being

more and more engaged with work (i.e., because it is important for the individual to do a thorough work). Consequently, although the effect of each level of generality is predictive of WA, their unique interactions might reveal interesting findings. Thus, in line with prior calls for a more comprehensive approach (Griffiths, 2005; Griffiths & Karanika-Murray, 2012) and for the avoidance of overpathologization (Billieux, Schimmenti, Khazaal, Maurage, & Heeren, 2015) future studies should put emphasis on attitudinal dimensions, situative, value and cultural factors, and their interaction with individual factors in investigating the causes and consequences of WA.

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*Funding sources:* All the authors were supported by the Hungarian Research Fund (NKFI FK 124225).

*Authors' contribution:* All the authors contributed equally to the manuscript in terms of literature review, manuscript drafting, and approval of final version of this article. Since all three authors contributed equally to the preparation of this article, their order was determined at random; all three authors should be considered as first authors.

*Conflict of interest:* All authors declare no conflict of interest.

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## REFERENCES

- Andreassen, C. S., Bakker, A. B., Bjorvatn, B., Moen, B. E., Magerøy, N., Shimazu, A., Hetland, J., & Pallesen, S. (2017). Working conditions and individual differences are weakly associated with workaholism: A 2-3-year prospective study of shift-working nurses. *Frontiers in Psychology, 8*, 2045. doi:10.3389/fpsyg.2017.02045
- Andreassen, C. S., Hetland, J., & Pallesen, S. (2010). The relationship between 'workaholism', basic needs satisfaction at work and personality. *European Journal of Personality, 24*(1), 3–17. doi:10.1002/per.737
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress, 22*(3), 187–200. doi:10.1080/02678370802393649
- Billieux, J., Schimmenti, A., Khazaal, Y., Maurage, P., & Heeren, A. (2015). Are we overpathologizing everyday life? A tenable blueprint for behavioral addiction research. *Journal of Behavioral Addictions, 4*(3), 119–123. doi:10.1556/2006.4.2015.009
- Birkeland, I. K., & Buch, R. (2015). The dualistic model of passion for work: Discriminate and predictive validity with work engagement and workaholism. *Motivation and Emotion, 39*(3), 392–408. doi:10.1007/s11031-014-9462-x
- Böthe, B., Tóth-Király, I., Zsila, Á., Griffiths, M. D., Demetrovics, Z., & Orosz, G. (2018). The development of the Problematic Pornography Consumption Scale (PPCS). *The Journal of Sex Research, 55*(3), 395–406. doi:10.1080/00224499.2017.1291798
- Brand, M., Young, K. S., Laier, C., Wölfling, K., & Potenza, M. N. (2016). Integrating psychological and neurobiological considerations regarding the development and maintenance of specific Internet-use disorders: An Interaction of Person-Affect-Cognition-Execution (I-PACE) model. *Neuroscience and Biobehavioral Reviews, 71*, 252–266. doi:10.1016/j.neubiorev.2016.08.033
- Burke, R. J. (2004). Workaholism, self-esteem, and motives for money. *Psychological Reports, 94*(2), 457–463. doi:10.2466/pr0.94.2.457-463
- Chak, K., & Leung, L. (2004). Shyness and locus of control as predictors of Internet addiction and Internet use. *Cyber-Psychology & Behavior, 7*(5), 559–570. doi:10.1089/cpb.2004.7.559
- Clark, M. A., Michel, J. S., Zhdanova, L., Pui, S. Y., & Baltes, B. B. (2016). All work and no play? A meta-analytic examination of the correlates and outcomes of workaholism. *Journal of Management, 42*(7), 1836–1873. doi:10.1177/0149206314522301
- Curran, T., Hill, A. P., Appleton, P. R., Vallerand, R. J., & Standage, M. (2015). The psychology of passion: A meta-analytical review of a decade of research on intra-personal outcomes. *Motivation and Emotion, 39*(5), 631–655. doi:10.1007/s11031-015-9503-0
- Deleuze, J., Long, J., Liu, T. Q., Maurage, P., & Billieux, J. (2018). Passion or addiction? Correlates of healthy versus problematic use of videogames in a sample of French-speaking regular players. *Addictive Behaviors, 82*, 114–121. doi:10.1016/j.addbeh.2018.02.031
- Fernet, C., Gagné, M., & Austin, S. (2010). When does quality of relationships with coworkers predict burnout over time? The moderating role of work motivation. *Journal of Organizational Behavior, 31*(8), 1163–1180. doi:10.1002/job.673
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*(4), 331–362. doi:10.1002/job.322
- Gagné, M., Forest, J., Vansteenkiste, M., Crevier-Braud, L., Van den Broeck, A., Aspli, A. K., Bellerose, J., Benabou, C., Chemolli, E., Güntert, S. T., Halvari, H., Indiyastuti, D. L., Johnson, P., Molstad, M. H., Naudin, M., Ndao, A., Olafsen, A. H., Roussel, P., Wang, Z., & Westbye, C. (2015). The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organizational Psychology, 24*(2), 178–196. doi:10.1080/1359432X.2013.877892
- Grant, A. M. (2008). The significance of task significance: Job performance effects, relational mechanisms, and boundary conditions. *Journal of Applied Psychology, 93*(1), 108–124. doi:10.1037/0021-9010.93.1.108
- Grant, A. M., Campbell, E. M., Chen, G., Cottone, K., Lapedis, D., & Lee, K. (2007). Impact and the art of motivation maintenance: The effects of contact with beneficiaries on persistence behavior. *Organizational Behavior and Human Decision Processes, 103*(1), 53–67. doi:10.1016/j.obhdp.2006.05.004
- Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use, 10*(4), 191–197. doi:10.1080/14659890500114359
- Griffiths, M. D., Demetrovics, Z., & Atroszko, P. A. (2018). Ten myths about work addiction. *Journal of Behavioral Addictions*. Advance online publication. 1–13. doi:10.1556/2006.7.2018.05
- Griffiths, M. D., & Karanika-Murray, M. (2012). Contextualising over-engagement in work: Towards a more global understanding of workaholism as an addiction. *Journal of Behavioral Addictions, 1*(3), 87–95. doi:10.1556/JBA.1.2012.002

- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250–279. doi:10.1016/0030-5073(76)90016-7
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage Publications.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind. Revised and expanded* (3rd ed.). New York, NY: McGraw-Hill.
- Howard, J. L., Gagné, M., Morin, A. J. S., & Forest, J. (2018). Using bifactor exploratory structural equation modeling to test for a continuum structure of motivation. *Journal of Management*, 44(7), 2638–2664. doi:10.1177/0149206316645653
- Howard, J. L., Gagné, M., Morin, A. J. S., & Van den Broeck, A. (2016). Motivation profiles at work: A self-determination theory approach. *Journal of Vocational Behavior*, 95, 74–89. doi:10.1016/j.jvb.2016.07.004
- Hu, Q., Schaufeli, W., Taris, T. W., Hessen, D. J., Hakonen, J., Salanova, M., & Shimazu, A. (2014). “East is East and West is West and never the twain shall meet:” Work engagement and workaholism across Eastern and Western cultures. *Journal of Behavioral and Social Sciences*, 1(1), 6–24. Retrieved from <https://www.wilmarschaufeli.nl/publications/Schaufeli/427.pdf>
- Keller, A. C., Spurr, D., Baumeler, F., & Hirschi, A. (2016). Competitive climate and workaholism: Negative sides of future orientation and calling. *Personality and Individual Differences*, 96, 122–126. doi:10.1016/j.paid.2016.02.061
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1–62). San Diego, CA: Academic Press.
- Liu, Q. X., Fang, X. Y., Deng, L. Y., & Zhang, J. T. (2012). Parent-adolescent communication, parental Internet use and Internet-specific norms and pathological Internet use among Chinese adolescents. *Computers in Human Behavior*, 28(4), 1269–1275. doi:10.1016/j.chb.2012.02.010
- Marino, C., Vieno, A., Pastore, M., Albery, I. P., Frings, D., & Spada, M. M. (2016). Modeling the contribution of personality, social identity and social norms to problematic Facebook use in adolescents. *Addictive Behaviors*, 63, 51–56. doi:10.1016/j.addbeh.2016.07.001
- Mazzetti, G., Vignoli, M., Schaufeli, W. B., & Guglielmi, D. (2017). Work addiction and presenteeism: The buffering role of managerial support. *International Journal of Psychology*. Advance online publication. doi:10.1002/ijop.12449
- Molino, M., Bakker, A. B., & Ghislieri, C. (2016). The role of workaholism in the job demands-resources model. *Anxiety, Stress, & Coping*, 29(4), 400–414. doi:10.1080/10615806.2015.1070833
- Mudrack, P. E. (2004). Job involvement, obsessive-compulsive personality traits, and workaholic behavioral tendencies. *Journal of Organizational Change Management*, 17(5), 490–508. doi:10.1108/09534810410554506
- Neighbors, C., Lee, C. M., Lewis, M. A., Fossos, N., & Larimer, M. E. (2007). Are social norms the best predictor of outcomes among heavy-drinking college students? *Journal of Studies on Alcohol and Drugs*, 68(4), 556–565. doi:10.15288/jasad.2007.68.556
- Orosz, G., Vallerand, R. J., Bóthe, B., Tóth-Király, I., & Paskuj, B. (2016). On the correlates of passion for screen-based behaviors: The case of impulsivity and the problematic and non-problematic Facebook use and TV series watching. *Personality and Individual Differences*, 101, 167–176. doi:10.1016/j.paid.2016.05.368
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York, NY: Guilford Publications.
- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2006). Dr. Jekyll or Mr. Hyde: On the differences between work engagement and workaholism. In R. J. Burke (Ed.), *Research companion to working time and work addiction* (pp. 193–217). Northampton, MA: Edward Elgar Publishing.
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology*, 57(2), 173–203. doi:10.1111/j.1464-0597.2007.00285.x
- Shimazu, A., Schaufeli, W. B., Kamiyama, K., & Kawakami, N. (2015). Workaholism vs. work engagement: The two different predictors of future well-being and performance. *International Journal of Behavioral Medicine*, 22(1), 18–23. doi:10.1007/s12529-014-9410-x
- Snir, R., & Harpaz, I. (2009). Workaholism from a cross-cultural perspective. *Cross-Cultural Research*, 43(4), 303–308. doi:10.1177/1069397109336987
- Sparkman, G., & Walton, G. M. (2017). Dynamic norms promote sustainable behavior, even if it is counternormative. *Psychological Science*, 28(11), 1663–1674. doi:10.1177/0956797617719950
- Spence, J. T., & Robbins, A. S. (1992). Workaholism: Definition, measurement, and preliminary results. *Journal of Personality Assessment*, 58(1), 160–178. doi:10.1207/s15327752jpa5801\_15
- Stoeber, J., Davis, C. R., & Townley, J. (2013). Perfectionism and workaholism in employees: The role of work motivation. *Personality and Individual Differences*, 55(7), 733–738. doi:10.1016/j.paid.2013.06.001
- Tóth-Király, I., Bóthe, B., Tóth-Fáber, E., Hága, G., & Orosz, G. (2017). Connected to TV series: Quantifying series watching engagement. *Journal of Behavioral Addictions*, 6(4), 472–489. doi:10.1556/2006.6.2017.083
- Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. *Advances in Experimental Social Psychology*, 29, 271–360. doi:10.1016/S0065-2601(08)60019-2
- Vallerand, R. J. (2015). *The psychology of passion: A dualistic model*. New York, NY: Oxford University Press.
- van Beek, I., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. (2012). For fun, love, or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology*, 61(1), 30–55. doi:10.1111/j.1464-0597.2011.00454.x
- Wang, C. C., & Chu, Y. S. (2007). Harmonious passion and obsessive passion in playing online games. *Social Behavior and Personality: An International Journal*, 35(7), 997–1006. doi:10.2224/sbp.2007.35.7.997