



**BRITISH ACADEMY
OF MANAGEMENT**

BAM
CONFERENCE

3RD-5TH SEPTEMBER

ASTON UNIVERSITY BIRMINGHAM UNITED KINGDOM

This paper is from the BAM2019 Conference Proceedings

About BAM

The British Academy of Management (BAM) is the leading authority on the academic field of management in the UK, supporting and representing the community of scholars and engaging with international peers.

<http://www.bam.ac.uk/>

Social media and their role for recovering from work demands: A cross-sectional study

Konstantina Foti^{1,*}, Despoina Xanthopoulou², Savvas Papagiannidis¹

¹ Newcastle University Business School, Newcastle upon Tyne, NE1 4SE, United Kingdom

² Aristotle University of Thessaloniki, Thessaloniki, 541 24, Greece

*Corresponding author:

Konstantina Foti

5 Barrack Road

Newcastle upon Tyne

NE1 4SE

United Kingdom

k.foti2@ncl.ac.uk

Social media and their role for recovering from work demands: A cross-sectional study

Abstract

Recovery from work is a central factor for employee well-being and refers to the process of psychological unwinding after effort expenditure at work. Recovery can occur daily during work and/or leisure through activities (e.g. low-effort, social, physical, and household) and can be experienced in different forms (i.e. the recovery experiences of psychological detachment, relaxation, mastery and control). However, there is still limited knowledge of the role of online activities (e.g. social media) on recovery. Applying the theories of Effort-Recovery and Conservation of Resources as a theoretical lens, this study aims to investigate the impact of social media on recovery, as well as the moderating factors therein. The study will follow a cross-sectional research design, targeting employees who use social media. The findings will help to identify the conditions under which social media impact recovery, and will provide insights to help employees as well as organisations who are interested in helping their employees flourish.

Keywords: flow, recovery, social media, uses and gratifications

Social media and their role for recovering from work demands: A cross-sectional study

Introduction

Employees spent one-third of their day at work (World Health Organization, 2017), facing cognitive, physical, and emotional demands (Bakker, Van Emmerik, Geurts & Demerouti, 2008). To successfully meet work demands, employees need to stay physically and mentally healthy. A key mechanism identified to help maintain energy, performance and well-being at optimal levels, is the process of recovery from the demands of work (Demerouti, Bakker, Geurts & Taris, 2009; Sonnentag, Binnewies & Mojza, 2008). Engaging in recovery activities that facilitate recovery helps employees and is beneficial for overall well-being and employee performance (De Bloom, Kompier, Geurts, de Weerth, Taris & Sonnentag, 2009; Kim, Park & Niu, 2017; Sonnentag *et al.*, 2008). Traditionally, research has focused on specific types of activities: physical, low-effort, household, work-related and social activities. However, due to major changes introduced by the progress of information and communication technologies (ICTs; i.e. smartphones, computers, Internet and its applications such as social media, etc.), many of the activities that employees engage in today are digital, take place online and relate to social media. Following this notion, the study aims to examine social media as a new context that may impact recovery and focus on the features of social media activities that may facilitate (or impede) the recovery process.

This study contributes to theory and practice in the following ways. First, it aims to explore under which social media type and motives, social media use can serve as recovery activity that facilitates recovery experiences. Social media use, as the dominant internet activity, is extremely common both in the workplace and during leisure. Thus, understanding recovery in relation to the social media context is important for organisations who want their employees to flourish. Second, despite existing studies focusing on the use and time spent on social media per se, this study will focus on why people use social media and its impact on recovery in an attempt to reveal which specific features of social media enact recovery experiences. Third, flow during social media activities is introduced as a psychological state that may moderate the social media activities-recovery experiences relationship. Flow has been recognized as an important state that may determine how people experience their online activities (Xanthopoulou & Papagiannidis, 2013). Studying the moderating role of flow will

help disentangle under which conditions specific characteristics of the social media activities are more likely to facilitate recovery. Fourth, narrowing the study to the social media context will help us overcome methodological issues (i.e. inconsistency in terminology and measurement of constructs) of previous studies grouping together a broad range of ICTs (Weatherbee, 2010).

Recovery from work

Recovery is a process of psychological unwinding during which employees' strain level, which has increased as a reaction to work stressors, returns to its pre-stressor level (Craig & Cooper, 1992). According to the effort-recovery model (E-R; Meijman & Mulder, 1998), excessive effort expenditure at work leads to acute responses (i.e. stress, fatigue, high blood pressure) which can be reversed only when work demands are no longer present. Thus, recovery from the psychophysiological activation due to high demands can take place only when employees are not preoccupied with work-related issues. In addition, according to conservation of resources (COR) theory (Hobfoll, 1989) people have the tendency to attain, retain and protect the available resources that they value (i.e. energy, conditions, personal characteristics, etc.). Employees recover when investing resources –other than those used at work– to gain new resources and restore those that they lost at work. Thus, recovery can occur internally, during work breaks, and externally, at leisure (i.e., off-job hours, weekends, vacations).

Recovery is important for employees and organisations. Daily recovery contributes positively to employee well-being (Oerlemans, Bakker & Demerouti, 2014; Sonnentag & Zijlstra, 2006), minimises the impact of work demands on negative affect (Kim *et al.*, 2017), reduces fatigue (Sonnentag *et al.*, 2008) and enhances sleep quality (Cropley, Dijk & Stanley, 2006; Demsky, Fritz, Hammer & Black, 2018; Kühnel, Zacher, De Bloom & Bledow, 2017). Organisations also benefit, as recovered employees perform better (Binnewies, Sonnentag & Mojza, 2010; de Bloom, Kinnunen & Korpela, 2015; Volman, Bakker & Xanthopoulou, 2013), are more engaged and demonstrate proactive behaviours from personal initiative and they pursue learning at work (Sonnentag, 2003; Sonnentag, Mojza, Demerouti & Bakker, 2012). In contrast, inadequate recovery has detrimental effects on health and well-being (Haluza, Schmidt & Blasche, 2019). Fatigue accumulation from the previous working day together with negative activation the following morning (Sonnentag *et al.*, 2008) can lead to

health problems in the long run (Geurts & Sonnentag, 2006). Inability to recover from the previous day is also associated with lower levels of job performance (Pencavel, 2016) and work engagement the next day at work (Lanaj, Johnson & Barnes, 2014). All the above illustrate the importance of successful recovery from work a healthy and productive workforce.

Recovery occurs when employees are engaging in *activities* (what people do) that facilitate *recovery experiences* (what people feel). Sonnentag (2001) identified five different activity types as focal for recovery: physical, low effort, social, household and work-related activities (Sonnentag, 2001). Although work-related activities have been systematically shown to relate negatively to recovery, the literature is mixed on how the other activity types contribute to recovery (Rook & Zijlstra, 2006; ten Brummelhuis & Trougakos, 2014). To address the mixed results, research moved beyond the activity itself. Recovery activities are not solely determining recovery, but the degree to which these activities facilitate *recovery experiences*. Sonnentag and Fritz (2007) suggested four recovery experiences: psychological detachment from work, relaxation, mastery and control. *Psychological detachment* refers to being not only physically, but also mentally away from work. *Relaxation* refers to a state of low activation that facilitates positive affect and decreases negative affect. *Mastery* refers to activities where individuals face challenges and learn. *Control*, finally, is the feeling that one can have an impact on and react to the activities taking place. This study contributes to research by introducing social media activities as a new context for all four recovery experiences to occur.

Information and Communication Technologies: The social media context

The rapid development of new technologies introduced major changes in both the work and home domains (Boswell & Olson-Buchanan, 2007; Derks & Bakker, 2014). Technology transformed jobs and blurred work and home boundaries resulting in flexible working hours and fluidity in individuals' roles (Ďuranová & Ohly, 2015). Moreover, individuals spend more and more time engaged in online activities, when they come home from work (Quinones & Griffiths, 2017). However, our knowledge is limited as to whether social media can act as a context for promoting well-being by accelerating recovery experiences, and under what conditions.

From the variety of digital and online activities that ICTs offer, the social media context is the most suitable for examining the recovery experiences. To begin with, social media users are online daily. In the UK alone, 66% of the population is on social media, with all age groups represented, being online for approximately 2 hours per day (Mander, 2017). Users are experiencing and expressing real life events and they share them with the world, on social media. Real and online life is not separate but one. In this context, behaviours in one space can affect other aspects as well.

ICTs, as an umbrella term, represent a broad range of technologies which revolutionised communications, information dissemination and interactions worldwide. Examples of ICTs are computers, mobile phones, wireless networks, the Internet and its components, such as the email and social media platforms (Day, Paquet, Scott & Hambley, 2012). This paper focuses on social media as the technological context that may determine the recovery experiences. In order to understand how social media platforms facilitate recovery experiences, it is important to see what their features are and why people are using them. These characteristics will be examined for their impact on employee recovery.

Social media are “web-based services that allow individuals, communities, and organizations to collaborate, connect, interact, and build community by enabling them to create, co-create, modify, share, and engage with user-generated content that is easily accessible” (McCay-Peet & Quan-Haase, 2017, p. 17). Adopting a recent taxonomy by McCay-Peet and Quan-Haase (2017), the main types of social media are: a) Social Networking Sites (Facebook, LinkedIn), b) Bookmarking (StumbleUpon), c) Microblogging (Twitter, Tumblr), d) Blogs and Forums (WordPress, LiveJournal), e) Media Sharing (YouTube, Instagram), f) Social news (Reddit), g) Collaborative authoring (Wikipedia, Google Docs), h) Web conferencing (Skype), i) Geo-location based sites (Foursquare, Tinder), j) Scheduling and Meeting (Doodle, Outlook).

Taking into consideration all the different types of social media, it is evident that users' motivation for entering each platform may differ. On the basis of uses and gratifications theory (Katz, Blumler & Gurevitch, 1973), we conceptualise the motives behind using social media. From the review of the literature, different types of uses and gratifications were identified and categorised into three groups: a) entertainment and passing the time, including gratifications such as relaxation/escape (Papacharissi & Rubin, 2000; Papacharissi &

Mendelson, 2011; Parker & Plank, 2000) and diversion/passing the time (Ferguson & Perse, 2000; Foregger, 2008; Papacharissi & Mendelson, 2011); b) social networking, with gratifications of interconnectedness and establishment of old ties (Foregger, 2008), companionship/social interaction (Parker & Plank, 2000), and professional advancement (Papacharissi & Mendelson, 2011; Zhang & Pentina, 2012); and c) information exchange, with expressive information sharing (Papacharissi & Mendelson, 2011) and information seeking (Papacharissi & Rubin, 2000). This approach offers a useful framework to investigate the evolving environment of social media users' motivations and utilising it for understanding the factors that affect the recovery experiences.

We argue that social media –and its gratifications– can act as a context that facilitates recovery experiences. Social media creates a context of escaping real-life problems, socialising, being involved actively with the user-generated content, being creative and generally a mental shift from work-hassles (Collins & Cox, 2014; Reinecke, Klatt & Kramer, 2011; Rieger, Hefner & Vorderer, 2017). The needs that people gratify through social media can promote psychological detachment, relaxation and mastery experiences, and help employees recover. Control can also be experienced as people are free to choose when and for how long to use social media, which in turn facilitates the other three recovery experiences (Hobfoll, 1989). Also, when people choose the activities they want to engage with, they are more likely to recover, due to minimum self-regulation requirements (Troughakos & Hideg, 2009).

The social media-recovery relationship: The moderating role of flow

Flow while engaging in social media activities may also play a moderating role in the recovery process. Coined by Csikszentmihalyi (1990; 1997) flow is defined as a “state of consciousness where people become totally immersed in an activity, and enjoy it intensely” (Bakker, 2005, p. 26). Flow dimensions are absorption (i.e. total immersion in an activity), intrinsic motivation (i.e. performing an activity for pleasure without thinking about rewards), and enjoyment (i.e. feeling happy; Bakker, 2005). Flow can occur with any type of activity – including social media– where individuals invest time, energy and effort, at any point in time and everyone perceives it differently (Csikszentmihalyi, 1997). In the context of ICTs, flow has been used to measure the experience that users have when engaging with online activities (Ghani & Deshpande, 1994).

Previous research suggests that flow is a key element for explaining human-computer interactions (Csikszentmihalyi, 1990; Hoffman & Novak, 1996; Koufaris, 2002; Webster, Trevino & Ryan, 1993). Following Hoffman and Novak (1996), to experience flow online, the activity should be self-reinforcing, provide immediate feedback, have a balance between its challenges and the user's skills, and the users should be totally immersed in the activity. Taking into account some of the main features of social media platforms (i.e. uses and gratifications) it is evident that people can also experience flow also with social media activities. When employees are motivated to use social media and the use is taking place with total immersion in the activity and intrinsic interest, they will be more likely to build personal resources (Zito, Cortese & Colombo, 2019), forget about work or learn something new, and thus experience psychological detachment and mastery. Similarly, the positive feelings of enjoyment from the activity are likely to boost the experience of relaxation (Xanthopoulou & Papagiannidis, 2013). Thus, we propose that high levels of flow will strengthen the relationship between social media gratifications and recovery from work, whereas the relationship will be weaker under conditions of low flow.

Methodology

The proposed theoretical framework is the first step towards studying the impact of ICTs on recovery experiences, in the context of social media. The next step of the project is data collection, to examine the relationships proposed. The study will adopt a cross-sectional design. On the basis of the research objectives and the exploration of particular relationships, as well as the adoption of a positivist and deductive approach, a survey design is used. By adopting a survey design, we will be able to collect our data from a range of respondents that are representative of the target population. Among the different survey techniques, this study will use a questionnaire survey to collect the appropriate quantitative data to serve the examination of the proposed relationships between the study variables.

The questionnaire will be divided into two sections. In the first section, participants will provide information about demographic variables (i.e. age, gender, industry, education etc.). Respondents will also provide information about social media, such as which social media they use, the frequency of use (in minutes) on a daily and weekly basis, and the number of friends/followers on the platform. Also, the motives behind social media use will be

measured here with items from the Internet Motives scale by Papacharissi and Rubin (2000). These questions will help us have a better understanding of the respondents' profile, in order to provide meaningful explanations from the results obtained. The second part of the questionnaire will focus on the well-being related items and the moderating factors. A few examples of instruments that will be used in the study are the 16-item Recovery Experience Questionnaire (REQ; Sonnentag & Fritz, 2007) and the work-related flow inventory (WOLF; Bakker, 2008). A pilot study will be conducted in advance, to ensure the feasibility of the project and identify problems (i.e. wording, grammar, sequence, length of the questionnaire, etc.). The final format of the questionnaire will be web-based, where responses will be collected on an online platform. In this way, we secure a diverse sample while reducing time and minimising costs.

With regards to the sample, a random sampling technique will be used, taking into consideration the relationships examined, as well as external validity and the generalisation of findings. The target population most suitable for our framework is individuals who are employed full-time, part-time, self-employed and/or entrepreneurs, and are social media users. Participants who do not fulfil both criteria will be excluded from the study. The reliability and validity of the study will be taken into consideration. Reliability will be measured with the Cronbach's α for the study items. Construct validity and common method bias will be examined with the use of confirmatory factor analysis. We will follow a multivariate analysis using Structural Equation Modelling (SEM) to test the relationships proposed.

References

- Bakker, A.B. (2005) 'Flow among music teachers and their students: The crossover of peak experiences', *Journal of vocational behavior*, 66(1), pp. 26-44.
- Bakker, A.B. (2008) 'The work-related flow inventory: Construction and initial validation of the WOLF', *Journal of vocational behavior*, 72(3), pp. 400-414.
- Bakker, A.B., Van Emmerik, I., Geurts, S.A. and Demerouti, E. (2008) 'Recovery turns job demands into challenges: A diary study on work engagement and performance', *Unpublished Working paper. Erasmus Universtiy.*
- Binnewies, C., Sonnentag, S. and Mojza, E.J. (2010) 'Recovery during the weekend and fluctuations in weekly job performance: a week-level study examining intra-individual relationships', *Journal of Occupational and Organizational Psychology*, 83(2), pp. 419-441.
- Boswell, W.R. and Olson-Buchanan, J.B. (2007) 'The use of communication technologies after hours: The role of work attitudes and work-life conflict', *Journal of Management*, 33(4), pp. 592-610.
- Collins, E. and Cox, A.L. (2014) 'Switch on to games: Can digital games aid post-work recovery?', *International Journal of Human-Computer Studies*, 72(8-9), pp. 654-662.
- Craig, A. and Cooper, R. (1992) 'Symptoms of acute and chronic fatigue', *Handbook of human performance*, 3, pp. 289-339.
- Cropley, M., Dijk, D.-J. and Stanley, N. (2006) 'Job strain, work rumination, and sleep in school teachers', *European Journal of Work and Organizational Psychology*, 15(2), pp. 181-196.
- Csikszentmihalyi, M. (1990) 'Literacy and intrinsic motivation', *Daedalus*, pp. 115-140.
- Csikszentmihalyi, M. (1997) *Finding flow: The psychology of engagement with everyday life*. Basic Books.
- Day, A., Paquet, S., Scott, N. and Hambley, L. (2012) 'Perceived information and communication technology (ICT) demands on employee outcomes: The moderating effect of organizational ICT support', *Journal of Occupational Health Psychology*, 17(4), p. 473.
- de Bloom, J., Kinnunen, U. and Korpela, K. (2015) 'Recovery processes during and after work: associations with health, work engagement, and job performance', *Journal of occupational and environmental medicine*, 57(7), pp. 732-742.
- De Bloom, J., Kompier, M., Geurts, S., de Weerth, C., Taris, T. and Sonnentag, S. (2009) 'Do we recover from vacation? Meta-analysis of vacation effects on health and well-being', *Journal of occupational health*, 51(1), pp. 13-25.
- Demerouti, E., Bakker, A.B., Geurts, S.A. and Taris, T.W. (2009) 'Daily recovery from work-related effort during non-work time', in *Current perspectives on job-stress recovery*. Emerald Group Publishing Limited, pp. 85-123.

- Demsky, C.A., Fritz, C., Hammer, L.B. and Black, A.E. (2018) 'Workplace incivility and employee sleep: The role of rumination and recovery experiences', *Journal of occupational health psychology*.
- Derks, D. and Bakker, A.B. (2014) 'Smartphone use, work–home interference, and burnout: A diary study on the role of recovery', *Applied Psychology*, 63(3), pp. 411-440.
- Řuranová, L. and Ohly, S. (2015) *Persistent Work-related Technology Use, Recovery and Well-being Processes: Focus on Supplemental Work After Hours*. Springer.
- Ferguson, D.A. and Perse, E.M. (2000) 'The World Wide Web as a functional alternative to television', *Journal of Broadcasting & Electronic Media*, 44(2), pp. 155-174.
- Foregger, S.K. (2008) *Uses and gratifications of Facebook. com*. ProQuest.
- Geurts, S.A. and Sonnentag, S. (2006) 'Recovery as an explanatory mechanism in the relation between acute stress reactions and chronic health impairment', *Scandinavian journal of work, environment & health*, pp. 482-492.
- Ghani, J.A. and Deshpande, S.P. (1994) 'Task Characteristics and the Experience of Optimal Flow in Human—Computer Interaction', *The Journal of Psychology*, 128(4), pp. 381-391.
- Haluza, D., Schmidt, V.M. and Blasche, G. (2019) 'Time course of recovery after two successive night shifts: A diary study among Austrian nurses', *Journal of nursing management*, 27(1), pp. 190-196.
- Hobfoll, S.E. (1989) 'Conservation of resources: A new attempt at conceptualizing stress', *American psychologist*, 44(3), p. 513.
- Hoffman, D.L. and Novak, T.P. (1996) 'Marketing in hypermedia computer-mediated environments: Conceptual foundations', *Journal of marketing*, 60(3), pp. 50-68.
- Katz, E., Blumler, J.G. and Gurevitch, M. (1973) 'Uses and gratifications research', *The public opinion quarterly*, 37(4), pp. 509-523.
- Kim, S., Park, Y. and Niu, Q. (2017) 'Micro-break activities at work to recover from daily work demands', *Journal of Organizational Behavior*, 38(1), pp. 28-44.
- Koufaris, M. (2002) 'Applying the Technology Acceptance Model and flow theory to online Consumer Behavior', *Information Systems Research*, 13(2), pp. 205-223.
- Kühnel, J., Zacher, H., De Bloom, J. and Bledow, R. (2017) 'Take a break! Benefits of sleep and short breaks for daily work engagement', *European Journal of Work and Organizational Psychology*, 26(4), pp. 481-491.
- Lanaj, K., Johnson, R.E. and Barnes, C.M. (2014) 'Beginning the workday yet already depleted? Consequences of late-night smartphone use and sleep', *Organizational Behavior and Human Decision Processes*, 124(1), pp. 11-23.

- Mander, J. (2017) *Daily time spent on social networks rises to over 2 hours*. Available at: <https://blog.globalwebindex.net/chart-of-the-day/daily-time-spent-on-social-networks/> (Accessed: December 2017).
- McCay-Peet, L. and Quan-Haase, A. (2017) 'What is Social Media and What Questions Can Social Media Research Help Us Answer?', *The SAGE Handbook of Social Media Research Methods*, p. 13.
- Meijman, T.F. and Mulder, G. (1998) 'Psychological aspects of workload', *Handbook of Work and Organizational Psychology. Volume, 2*.
- Oerlemans, W.G.M., Bakker, A.B. and Demerouti, E. (2014) 'How feeling happy during off-job activities helps successful recovery from work: A day reconstruction study', *Work & Stress*, 28(2), pp. 198-216.
- Papacharissi, Z. and Mendelson, A. (2011) '12 Toward a new (er) sociability: uses, gratifications and social capital on Facebook', *Media perspectives for the 21st century*, 212.
- Papacharissi, Z. and Rubin, A.M. (2000) 'Predictors of Internet use', *Journal of broadcasting & electronic media*, 44(2), pp. 175-196.
- Parker, B.J. and Plank, R.E. (2000) 'A uses and gratifications perspective on the Internet as a new information source', *American Business Review*, 18(2), p. 43.
- Pencavel, J. (2016) 'Recovery from work and the productivity of working hours', *Economica*, 83(332), pp. 545-563.
- Quinones, C. and Griffiths, M.D. (2017) 'The impact of daily emotional demands, job resources and emotional effort on intensive internet use during and after work', *Computers in Human Behavior*, 76(C), pp. 561-575.
- Reinecke, L., Klatt, J. and Kramer, N.C. (2011) 'Entertaining Media Use and the Satisfaction of Recovery Needs: Recovery Outcomes Associated With the Use of Interactive and Noninteractive Entertaining Media', *Media Psychology*, 14(2), pp. 192-215.
- Rieger, D., Hefner, D. and Vorderer, P. (2017) 'Mobile recovery? The impact of smartphone use on recovery experiences in waiting situations', *Mobile Media & Communication*, 5(2), pp. 161-177.
- Rook, J.W. and Zijlstra, F.R. (2006) 'The contribution of various types of activities to recovery', *European journal of work and organizational psychology*, 15(2), pp. 218-240.
- Sonnentag, S. (2001) 'Work, recovery activities, and individual well-being: a diary study', *Journal of occupational health psychology*, 6(3), p. 196.
- Sonnentag, S. (2003) 'Recovery, work engagement, and proactive behavior: a new look at the interface between nonwork and work', *Journal of applied psychology*, 88(3), p. 518.

- Sonnentag, S., Binnewies, C. and Mojza, E.J. (2008) "' Did you have a nice evening?'" A day-level study on recovery experiences, sleep, and affect', *Journal of Applied Psychology*, 93(3), p. 674.
- Sonnentag, S. and Fritz, C. (2007) 'The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work', *Journal of Occupational Health Psychology*, 12(3), pp. 204-221.
- Sonnentag, S., Mojza, E.J., Demerouti, E. and Bakker, A.B. (2012) 'Reciprocal relations between recovery and work engagement: The moderating role of job stressors', *Journal of Applied Psychology*, 97(4), p. 842.
- Sonnentag, S. and Zijlstra, F.R.H. (2006) 'Job characteristics and off-job activities as predictors of need for recovery, well-being, and fatigue', *Journal of Applied Psychology*, 91(2), pp. 330-350.
- ten Brummelhuis, L.L. and Trougakos, J.P. (2014) 'The recovery potential of intrinsically versus extrinsically motivated off-job activities', *Journal of Occupational and Organizational Psychology*, 87(1), pp. 177-199.
- Trougakos, J.P. and Hideg, I. (2009) 'Momentary work recovery: The role of within-day work breaks', in *Current perspectives on job-stress recovery*. Emerald Group Publishing Limited, pp. 37-84.
- Volman, F.E., Bakker, A.B. and Xanthopoulou, D. (2013) 'Recovery at home and performance at work: A diary study on self-family facilitation', *European Journal of Work and Organizational Psychology*, 22(2), pp. 218-234.
- Weatherbee, T.G. (2010) 'Counterproductive use of technology at work: Information & communications technologies and cyberdeviancy', *Human Resource Management Review*, 20(1), pp. 35-44.
- Webster, J., Trevino, L.K. and Ryan, L. (1993) 'The dimensionality and correlates of flow in human-computer interactions', *Computers in Human Behavior*, 9(4), pp. 411-426.
- World Health Organization (2017) *Global strategy on occupational health for all: The way to health at work*. Available at: http://www.who.int/occupational_health/publications/globstrategy/en/index2.html (Accessed: July).
- Xanthopoulou, D. and Papagiannidis, S. (2013) 'Games-work interaction: The beneficial effects of computer games for work behaviors', *Digital media at work*, pp. 102-122.
- Zhang, L. and Pentina, I. (2012) 'Motivations and usage patterns of Weibo'.
- Zito, M., Cortese, C.G. and Colombo, L. (2019) 'The Role of Resources and Flow at Work in Well-Being', *SAGE Open*, 9(2), p. 2158244019849732.