Exploring the Antecedents of Work-to-life Conflict under the Context of Bring Your Own Device

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Exploring the Antecedents of Work-to-life Conflict under the Context of Bring Your Own Device

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Abstract

Recently, the rapid adoption of smartphones and tablets among employees has forced organizations to proactively embrace the concept of Bring Your Own Device (BYOD). Allowing employees to bring their own mobile devices to the workplace has blurred the boundary between work and personal life and therefore created a stressful environment for employees when they are performing both work role and family role. This study explores the influencing factors of work-to-life conflict under the context of BYOD. A new construct - workplace connectivity was introduced to the BYOD attributes model. Based on the boundary theory, a theoretical model with eight hypotheses was developed.

Keywords: Bring Your Own Device (BYOD), work-to-life conflict, workplace connectivity

Introduction

BYOD means allowing employees to take their own mobile electronic communication device into the workplace and use it in place of or, in some cases in addition to their work PC and/or phone tablet or smartphone, etc (Scarfò, 2012). Statistics have shown that 74% of the organizations have allowed or planning to allow employees to bring their own devices to work (ZDNet, 2015). One of the obvious drawbacks for employees is they implicitly accept the tradeoffs of work-life balance and more off-hours working (Dell and Intel, 2011). In other words, it implies a blurred work-life boundary and 100% availability when they are “called on”. This study focuses on the employees’ attitude toward work-to-life conflict when practicing BYOD.

Under the BYOD context, mobile devices are used by organizations as an exciting and inexpensive weapon to bridge the work/home divide, and further to converge people’s work with personal life. When employees are not adaptive to this new change brought by the mobile usage or they have a strong preference to separate work from life (Sarker et al., 2012), work-to-life conflict occurs. Work-to-life conflict is a form of inter-role conflict whereby the role demands of one domain interfere with meeting the demands of a role in another domain (Greenhaus & Beutell, 1985). In this study, similar with prior researchers (e.g., Boswell and Olson-Buchanan, 2007; Yun, et al., 2012), we focus on how work demands may interfere with one’s personal life during the non-working hours.

In the general literature of work-to-family conflict, quite a few independent variables were employed to predict work-to-family conflict. However, in the literature related to mobile technology usage, especially its usage in the workplace, the antecedent factors toward work-to-life conflict are not extensively explored. One of the most recent and similar studies (Yun et al., 2012) examined the impact of Office-Home smartphone attributes on work-to-life conflict; however, their results were...
Antecedents of work-to-life conflict in BYOD context

inconsistent with the prior literature (e.g., Ahuja, et al. 2007) and somehow inconclusive. In this study, we focus on BYOD instead of Office-Home smartphone in general, since we believe the mobile devices owned by the employees themselves could better depict the conflict when they are used for work purposes at home. Furthermore, we introduced a new dimension of BYOD attribute (workplace connectivity). We contribute to the existing body of knowledge by exploring all possible features of BYOD, and explore their relationships toward work-to-life conflict. Given the above reasons, we examine the following research questions: (1) what are the unique attributes of BYOD usage; (2) what are the relationships between different BYOD attributes; (3) will these attributes affect employee’s work-to-life conflict?

Literature review

Work-to-life conflict and the antecedents of work-to-life conflict

Work-to-life conflict is defined as the inter-role conflict where the demands created by the job interfere with performing family-related responsibilities (Greenhaus and Beutell, 1985). In addition, we use work-to-life (rather than work-to-family) conflict to emphasize the potential role of personal-owned mobile device use interfering with personal life. Work-life conflict research has attracted great attention from researchers, since it may lead to significant organizational outcomes (Anderson et al, 2002). Researchers in organizational sciences, communication, family relations and applied psychology have extensively studied the antecedents of work-life conflict. Kirby et al. (2006) were among the first to comprehensively analyze the antecedents of work-life-conflict. They divided work-life conflict into three categories: work-related factors, life-related factors and personal characteristics. Here, we focus more on the work-related factors. Some typical research in this category also include: Ahuja et al. (2007), Anderson et al. (2002).

When it comes to the context of smartphone usage or BYOD in particular, few studies have explored the antecedents of work-to-family conflict. We found it is especially meaningful to take BYOD as a research background since organizations are increasingly using this personally owned mobile device as a tool to bridge employee's professional and personal life (Revenaugh and Schweigert, 2013). Boswell and Olson-Buchanan (2007) are among the pioneers to understand the impact of communication technology usage after work on work-to-life conflict. They believed communication technology use after hours is more likely to associate with work-to-life conflict since these technologies hold the potential to interrupt or distract an individual at any time and any place. Their results suggested that communication technology use after hours positively associate with employee’s work-to-life conflict. Richardson and Thompson (2012) built a theoretical model to investigate how work connectivity influence work interference with family. The research results confirmed that “work connectivity behavior after hours” had a significant effect on work-to-life conflict. Inspired by Richardson and Thompson (2012), Wright et al. (2014) reemphasized the importance of introducing “connectivity” to the framework on work-to-life conflict. Similar with Boswell and Olson-Buchanan (2007), they focused on work-life conflict that arises from the use of communication technologies in general, and stressed its usage outside the regular work hours. Their work provided empirical support that the usage of communication technology blurs the boundaries between work and home, and thereby, increase the perception of work-to-life conflict. Under the BYOD context, Chang et al. (2014) was the first to investigate the consequences of work-to-life conflict; and Yun et al. (2012) was among the first comprehensive studies to examine the antecedents and the outcomes of work-to-life conflict. Their results revealed some inter-relationships between the Office-Home Smartphone attributes; however, only work overload had a significant positive impact on work-to-life conflict.

BYOD attributes

Connectivity

It is not until recent years that researchers began to realize the uniqueness of constant connectivity for mobile device usage at the workplace. Dery and MacCormick (2012), first elucidated that smartphone usage is evolving from an emphasis on mobility to connectivity. Inspired by this, we introduce the concept of “workplace connectivity”. “Workplace connectivity” was first invented by Schlosser (2002), and formally introduced to the line of researchers by Richardson and Benbunan-Fich (2011). In their work, they focused on the Work Connectivity Behavior After-hours (WCBA). WCBA is defined as an organization member’s use of portable wireless devices to engage with work or work-related colleagues during non-work time. Studying workplace connectivity behavior after hours is more relevant in the current research, since such a behavior is particularly associated with work-to-life
conflict – the constant availability has the potential to interrupt or distract an individual ubiquitously (Boswell and Olson-Buchanan, 2007). Toward this end, Richardson and Benbunan-Fich (2011) examined the organizational and individual factors leading to WCBA. Richardson and Thompson (2012) investigated the direct and indirect relationship between WCBA (duration and frequency) and work-to-life conflict. Wright et al. (2014) also appealed more research to study work-to-life conflict stemming from increased connectivity. To further explore the consequences of WCBA, this research takes WCBA as an important new dimension to predict work-to-life conflict.

**Flexibility, productivity and work overload**

Flexibility is one of the natural attributes of mobile device usage, since flexible working arrangement is the initial and ultimate goal of using these personally owned mobile devices. In Hill et al. (2001), flexibility is divided into flextime and flexplace. Yun et al. (2012) adopted Hill et al. (2001)’s approach, and centered their study on the location and timing flexibility of work. Other researchers, however, only focused on the study of flextime (e.g., Yang and Zheng, 2011; Anderson, et al. 2002). For the purpose of this research, both flextime and flexplace are relevant, since with the mobile device usage, employees are expected to work anytime, anyplace as requested. We therefore define job flexibility as the flexibility in the timing of work and the flexibility in the location of work.

Researchers from sociology, economics and organizational behavior have repeatedly studied the productivity, this research however only intends to investigate how the use of modern information technology could influence individual’s productivity. Productivity has been seen as one of the major outcomes of using mobile technologies at the workplace. Academic researchers such as Niehaves et al. (2012) and Rege (2011) have claimed BYOD could increase employee’s morale and satisfaction and thus leads to an increase in productivity. In view of this, productivity is an impartible component when exploring BYOD attributes in the current research.

Work overload has also been studied frequently by before. In the context of information technology usage, Ayyagari et al. (2011) proposed an idea of presenteeism, which is defined as the degree to which information and communication technology enables users to be reachable. Work overload could therefore occur at any time when the user is “reachable”. McFarlane and Latorella (2002) viewed information and communication technology as the source of interruptions in human computer literature, which resulted in lower efficiencies and stress. At last, Niehaves et al. (2012) stated that BYOD leads to a blur between private and work life, thus increase the perceived workload.

Based on the above discussions on work-to-life conflict and BYOD attributes, the present study intends to include most of the work-related and influential factors in the literature as the antecedents of work-to-life conflict, especially the unique feature of “workplace connectivity”. In addition, since BYOD emphasizes the personal-owned mobile devices usage for work purposes, it should be a better research context than communication technology or Office-Home Smartphone in general to reflect the vibrant perception of work-to-life conflict after hours. Third, regarding to the specific BYOD attributes and the relationship among them, very few studies have explored in this area. There are even controversial or inconsistent results about the relationships between BYOD attributes and between BYOD attributes and work-to-life conflict (e.g., Hill, 1996). To clarify the ambiguity in the literature, based on boundary theory or work-family border theory, we propose a new research framework to explore the BYOD attributes, and the relationship between the attributes and the work-to-life conflict.

**Theoretical foundation**

This study grounds in the boundary theory (Hall and Richter, 1988). The theory proposes that individuals manage the boundaries between work and personal life through the processes of segmenting and/or integrating the domains. The theory also characterizes the strength of the boundary by permeability and flexibility. Boundary permeability is defined as elements from one domain are readily found in the other domain (Ashforth, et al., 2000). Permeability might be thought of as actual interruptions or intrusions from one domain into the other, over which the employee may have little control. A good example could be when an employee is contacted by work while she/he is at home. Mobile technology is said to change the traditional spatial and temporal boundaries between work and life, resulting in more permeable boundaries in which work is completed during personal time and life is conducted on-line during working hours (Dery and MacCormick, 2012). Because of the permeable/blurred boundary, mobile technology use after hours is likely to associate with work-to-life conflict, which is the central focus of this study. Boundary theory also focuses on role conflict and role transition. Permeability is suggested to be highly related to greater role (e.g., work and family) integration (Boswell and Olson-Buchanan, 2007). In the following, we are going to discuss further on
how to use the boundary theory, especially the concept of permeability and role integration to explain the relationship between BYOD attributes and work-to-life conflict.

Research model and hypotheses development

WCBA is the use of portable mobile devices to engage with work or colleagues during non-work time. The original purpose of using such a mobile device is to make communication across time and geographic boundaries easier, and thus increase the productivity among workers by removing temporal and spatial barriers (Lytyinen and Yoo, 2002). Research has shown that being connected to the workplace after hours gives employees a sense of control and safety (Richardson and Thompson, 2012), so that they could freely arrange their work schedule and increase productivity (Rege, 2011).

H1: WCBA due to BYOD will be positively related to individual productivity.

Constant connectivity provided by information and communication technologies increases the workload by enhancing the speed of work flow and expectations of productivity (Ayyagari, et al., 2011). Employees have to work under time pressures and strict deadlines, which are treated as a source of work overload (Cooper, et al. 2001). Based on the boundary theory, role stress could happen when one is given more roles than one can handle (Kahn, et al. 1964). When people are working after regular hours, they are simultaneously enrolled with both work and family roles, and there are usually no clear rules or expectations from the organization suggesting how long employees should work by using their personal mobile devices (Stephens, et al., 2012).

H2: WCBA due to BYOD will be positively related to work overload.

Flexibility includes flextime and flexplace (Hill, et al. 2001). In terms of flextime, Yang and Zheng (2011) noted that since not everybody is most productive during the normal working time, flextime allows workers to adjust their working schedules or their bio-clock to work the hours when prefer and feel most productive. As individuals make more efficient use of their own rhythm, their job performance will be improved. Flextime can also increase worker’s productivity through intermediate and indirect effects, such as an increase in worker’s job satisfaction and job autonomy (DeCarufel and Schaan, 1990), and a decrease in their absenteeism and work-related stress (Baltes, et al., 1999).

H3: Flexibility due to BYOD will be positively related to individual productivity.

Although a considerable part of the workforce appreciates flexible working procedures, they lead to heavier workloads too. Employees in most occasions, simply feel an obligation to be working around the clock due to the “convenience” mobile devices bring to them. The result is unavoidably increased working hours. Researchers such as Sarker et al. (2012) mentioned that while mobile technologies undoubtedly facilitate flexibility and free people from restricted hours and physical locations, they also blur boundaries of work and personal life. The blurring leads to role stress and higher level of workload. Jeddi (2014) further commented that the flexibility brought by the mobile devices increases not only the physical workload but also the information load and cognitive load of the employees.

H4: Flexibility due to BYOD will be positively related to work overload.

Mobile devices enable the features of reviewing, editing documents, replying emails and social interactions (Yun, et al. 2012). Individual productivity is a combination of efficiency and effectiveness (Payne, 2000). Employees tend to handle the daily job more efficiently within the work hours, and thus avoid using them to work at the non-work time (Batt and Valcour, 2003). This reduces the interrole conflict of the employee and thus leads to a decrease of work-to-life conflict.
H5: Individual productivity due to BYOD will be negatively related to work-to-life conflict.

Work overload has been identified as one of the strongest and most consistent predictors of work-to-life conflict (Geurts and Demerouti, 2003). Perceived work overload is associated with a higher level of work-to-life conflict, especially when the person occupies the boundary role (Ahuja, et al. 2007). Facilitated by the modern communication technologies, the employees bringing their own mobile devices have become the boundary-role persons spanning work and family domains.

H6: Work overload due to BYOD will be positively related to work-to-life conflict.

Based on the boundary theory, boundary permeability epitomizes role conflict (Hall and Richter, 1988), in that individuals are attending to two domains, with their separate norms and expectations simultaneously. While at home, individuals are not readily available, either psychologically or physically, to pursue those responsibilities deemed to be of importance by the work role (Fenner and Renn, 2004). Therefore, the greater level of connectivity after hours will lead to more work role intruding in and detracting from personal life (Boswell and Olson-Buchanan, 2007).

H7: WCBA due to BYOD will be positively related to work-to-life conflict.

Many research on the relationship between flexibility and work-to-life conflict support a negative relationship between these two. Examples could be found from Anderson et al. (2002) that flexible time and work place give employees greater control over work and family matters, thereby helping employees manage the often conflicting demands of work and family. The autonomy could help the employee to better balance work and family demands; it will also make the employee feel less taunted with stress boredom, fatigue or work-to-life conflict (Hill et al., 2001).

H8: Flexibility due to BYOD will be negatively related to work-to-life conflict.

Research methods

We have borrowed the measures of the key constructs from the following studies: WCBA - Richardson and Benbunan-Fich (2011); flexibility - Skinner and Pocock (2010); productivity - Tarafdar et al. (2007); work overload - Yun et al. (2012), Skinner and Pocock (2010); and work-to-life conflict - Yun et al. (2012) and Ahuja et al. (2007). Due to the page limitation, a more detailed summary of the measures will be shown in the presentation.

The cross-sectional survey was conducted through LinkedIn. Three BYOD groups were selected as the sampling pool. The professionals joining the BYOD groups are somehow relevant to the use of BYOD, and tend to express their perceptions toward BYOD policy. The questionnaire was delivered to each individual user through LinkedIn private message. Once the individual agreed to participate, he/she will be automatically led to the online survey. After the data collection, SmartPLS 3.0 will be used to analyze the data in the Structural Equation Modeling. Both measurement model and structural model will be assessed. The mediating effect of productivity and work overload will also be evaluated. This research endeavors to find the influencing factors of work-to-life conflict when using personally-owned mobile devices for work purposes. The empirical results of this research could help BYOD decision makers to carefully consider the ethical issue before a wide adoption of the BYOD practice

References


