What Happened to the Border? The Role of Mobile Information Technology Devices on Employees’ Work-life Balance

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<th>Journal:</th>
<th>Personnel Review</th>
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<td>Manuscript ID</td>
<td>PR-08-2016-0222.R2</td>
</tr>
<tr>
<td>Manuscript Type:</td>
<td>Research Article</td>
</tr>
<tr>
<td>Keywords:</td>
<td>Work-Life Balance (WLB), Mobile technology, Employees, Flexibility, Border theory</td>
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<td>Methodologies:</td>
<td>Qualitative, Critical, Mixed Methodologies</td>
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What Happened to the Border? The Role of Mobile Information Technology Devices on Employees’ Work-life Balance

Abstract

**Purpose** – Mobile information technology devices (MITDs) are of special interest for researchers who seek to understand the role of these devices on employees’ work-life balance (WLB). This study examines the role of MITDs on employees’ WLB.

**Methodology** – This article uses semi-structured interviews to investigate the role of MITDs on employees’ WLB.

**Findings** – The findings underscore the important role of MITDs in terms of the attainment of flexibility (how, where, and when work is done), which is significant for achieving WLB. However, the use of MITDs has blurred the division between work and non-work domains. This has inadvertently lengthened employees’ working hours, has affected their family relationships, and affected their general health and wellbeing. The evidence suggests that MITDs have the potential to improve WLB but could also lead to work-life conflict if not properly managed.

**Originality/value** – The study calls for a re-examination of WLB policies and practices, specifically border theory, in order to ensure that MITDs can enhance productivity without inadvertently resulting in poor WLB.

**Key words**: work-life balance, mobile technology, employees, flexibility, border theory
Introduction

Work-life balance (WLB) is an important theme in mainstream Human Resource Management (HRM) literature (Raiden and Caven, 2011), with a plethora of initiatives designed to help employees to reconcile the competing demands of their paid work and non-work responsibilities (Ford and Collinson, 2011). However, the continuous emergence of sophisticated mobile information technology devices (MITDs) has changed both the way that work is done and the structure of employees’ non-work lives. This has been further exacerbated by the huge number of people who have access to and use MITDs. According to a United Nations (UN) report (2013), an estimated 6 billion people have access to mobile phones. Therefore, smartphones and other MITDs have inspired researchers to consider how to define the work and non-work time periods of employees (Den-Nagy, 2014). Since the 1980s, the border between employees’ work and non-work domains has become increasingly blurred (Currie and Eveline, 2011), with increasing boundary porosity (Warhurst, Eikhof and Haunschild, 2008). Development and use of sophisticated information technology systems have contributed to this phenomenon (Hislop and Axtell, 2009). Technology has changed business modes and practices for millions of employees all over the world (Duxbury and Smart, 2011). Specifically, MITDs have rendered Kahn et al.’s (1964) work on the separation of work and family (non-work) roles in terms of time and space invalid. They argued that work occurs during designated hours and at a place away from home and that transitions between work and home-based roles are distinct and well defined. However, work can now be done at anytime and anywhere (Glucksmann and Nolan, 2007). Arguably, even though MITDs provide resources which enhance productivity and work performance, they can also serve as a source of challenge to the management of the WLB of employees. MITDs have enhanced and enabled what used to be classified as office work to be done anywhere, anytime. Consequently, this has had a major effect on employees’ WLB. This article examines the role of
MITDs on employees’ WLB, and attempts to answer the question: Do MITDs enhance employees’ WLB or exacerbates employees’ work-life conflict? Furthermore, the article unmask the role of MITDs in terms of the borders between work and non-work domains and employees’ movements across those borders. Studies on how employees balance their work and private lives is an old area of academic enquiry (Den-Nagy 2014). Despite the significant number of WLB studies (Casper et al., 2007; Chang et al., 2010; Kesting and Harris, 2009; Qu and Zhao, 2012), the role of information and commutation technology (ICT) and MITDs on employees’ WLB has not received adequate attention. Notwithstanding the prevalence of such devices in the work and private lives of the majority of people in employment, only a few studies analyse WLB from the ICT perspective (Den-Nagy, 2014; Pica and Kakihara, 2003). The majority of the existing studies have also used quantitative approaches, which do not adequately evaluate the relevant nuances prevalent in employee border movements with respect to MITDs.

The main contribution of this study is to examine the role of MITDs on employees’ WLB. The article further discusses how contemporary HRM and employees can make the most of MITDs (such as mobile smartphones – such as Blackberry, iPhone, etc., tablets, laptop computers and other integrated wireless devices) in terms of balancing the competing demands of their work and non-work lives. From a theoretical perspective, the research question is espoused through a critical discussion of extant literature on WLB. Theoretically, border theory has been employed to underpin this study. This is done in order to achieve the research objectives. The remainder of this paper is organised as follows: Firstly, we contextualise WLB and MITDs separately. Secondly, we discuss the theoretical basis for the research. Thirdly, we outline the methodology. Fourthly, we present the findings and then discuss their implications. Finally, we then draw conclusions.
WLB in Context

Balancing work and non-work demands is a challenge for employees and employers (Valcour, 2007). It has also been argued that employees’ best interests are served when they live a balanced life (Kofodimos, 1993). The term WLB means different things to different people depending on the contextual use thereof (Lockwood, 2003). Researchers have defined “balance” differently. For some, “balance” means an absence of conflict or a particularly low level of conflict (Clark, 2000; Saltzstein et al., 2007). Alternatively, for others, it means having greater enrichment than conflict (Frone, 2003; Aryee et al., 2005). For the latter group, enrichment cancels the detrimental effect of conflict and balance is then achieved (Haar, 2013). However, Osoian, Lazar and Ratiu (2011) argue that the word “balance” does not mean allocating equal amounts of energy and time to work related and non-work related duties. It means, in essence, allowing employees some degree of flexibility and control over when, where, and how they do their daily work (Kesting and Harris, 2009). The terms WLB and work-family balance (WFB) are sometimes used interchangeably (Lyness and Judiesch, 2014). WLB is, however, a more inclusive term (Lewis and Campbell, 2008). The term WLB broadens the activities included in the “life” or non-work domain to include family as well as other personal activities and interests (Greenhaus and Allen, 2011). Although WLB has emerged as a popular topic in the media, among policymakers, and in academic circles (Guess, 2001), a general acceptable definition of the construct is somewhat elusive (Lewis and Campbell, 2008; Wada, Backman and Forwell, 2010). For the purpose of this study, however, WLB is defined as “employees’ ability to negotiate successfully their work and family commitments, as well as other non-work responsibilities and activities” (Parkes and Langford 2008, p. 267). This definition of WLB
includes employees’ responsibilities and activities other than family commitments. It also recognises employees’ desires to find a healthier and more satisfying WLB, irrespective of their marital or parental status.

The fact that WLB is crucial for success in today’s highly competitive business world can no longer be denied (Ilies, Schwind and Wagner, 2009; Qu and Zhao, 2012). WLB should invariably offer employees the freedom to choose (to a certain degree depending on the requirements of their job) when, how, and where they carry out their work obligations (Kesting and Harris, 2009). In fact, these are core canons of WLB and afford employees the “right to fulfil work related and non-work duties to the benefit of both the employer and the employees” (Fleetwood, 2007, 351). The challenges of WLB have received significant attention in the relevant literature. For example, research on work and family domains (Adisa, Mordi and Mordi, 2014; Adisa, Gbadamosi and Osabutey, 2016; Edwards and Rothbard, 2000) abound. Other studies have examined employers’ programmes, such as flexible working schedules, alternative work arrangements, and childcare facilities. These have been developed to support employees with their non-work related responsibilities (Hughes and Galinsky, 1988; Kossek and Nichol, 1992; Powell and Mainiero, 1999). However, as technology continues to advance at a frenzied pace (Taskin and Bridoux, 2010), employees’ WLB needs to be examined using a lens which takes this phenomenon into consideration. Furthermore, there is a need for employers and employees to understand how the advent of sophisticated technologies and MITDs has significantly influenced how, when, and where paid work is done (Towers et al., 2006). Empirical research on the relationship between MITDs and employees’ WLB is scarce and this article empirically probes into the contemporary issue of the role of MITDs in employees WLB.

MITDs in Context
MITDs have undoubtedly enhanced teleworking among today’s employees (Gajendran and Harrison, 2007). Technology (including various MITDs) has altered the spatial and temporal configuration of work (Taskin and Edwards, 2007). Telework is increasingly becoming a global practice (Davis and Polonko, 2003). In fact, the global mobile workforce is expected to rise from 1.32 billion in 2014 to 1.75 billion in 2020, representing 42% of the global workforce (Luk, 2015). The term “telework” is often used interchangeably with “telecommuting” and “virtual work” (Gajendran and Harrison, 2007; Siha and Monroe, 2006). These terms mean a variety of arrangements which involve working away from the conventional workplace and communicating by way of telecommunications or computer-based technology (Bailey and Kurland, 2002).

Traditionally, paid work takes place in a workplace (location), usually between 9am-5pm (time) (Duxbury and Smart, 2011). The relevant literature and evidence from evolving work demands suggests that MITDs have encroached the hitherto clear demarcation between the work and non-work domains (Eikhof, Warhurst and Haunschild, 2007; Golden and Geisler, 2007). The advent of these devices means that Kahn et al.’s (1964) work on the separation of work and family roles requires further evaluation. The implication that work-related activities take place during designated hours at a location away from home may no longer be entirely valid. Contemporary mobile devices have made it possible for work to take place at any location away from a workplace or to attend to personal business or familial issues at work (Shumate and Fulk, 2004).

For example, most organisations, however big or small, now lean towards a 24 hour e-mail culture. This culture requires employees to check and respond to their work e-mails outside of their contracted working hours (Waller and Ragsdell, 2012). In essence, the use MITDs means that employees are able to continue attending to their work-related activities wherever they are. MITDs facilitate fast and prompt communication between employees and employers.
(Chamakiotis, 2014), and between employees and clients and other external constituents. These devices enable instant availability for both work and non-work duties, integrating the border between work and non-work domains (Lee, 2009). This, in essence, means that MITDs have restructured old social traditions of communication (Roy, 2016). According to Shumate and Fulk (2004, p. 56), “mobile technology has shifted our view of the family domain from a ‘place of refuge… leisure and entertainment’ where the worker is ‘free from outside expectations and surveillance’ to a location where e-lancers perform legitimate work”. Pica and Kakihara (2003) also hold the same view. Debates about how the use of MITDs impacts employees’ work and non-work lives have become widespread (Gephart, 2002; Towers et al., 2006). However, an extensive review of extant literature indicates that there is a dearth of empirical evidence on how the use of these technologies impacts employees’ WLB. Based on the emergent discourse on mobile technology and WLB (Cousins and Robey, 2015; Duxbury and Smart, 2011; Towers et al., 2006), this study aims to explore the effects of MITDs on employees’ WLB.

**Theoretical Background**

Labour process theory (LPT) has been widely used as a platform for analysing work and organisation. It is, however, not just a theory of workplace behaviour (Ackroyd, 2009). Broadly, we underpin this study with the LPT and specifically with the Border theory. Most of the early work on labour process theory was written within a broad Marxist framework (Adler, 2007). The ‘labour process’ perspective on how work is organised suggests that managerial action is mainly driven by the capital-labour relations. Additionally, it is influenced by management’s strategies which tend to dominate and control labour in order to stabilise it as a critical factor of production. However, because it is an integral part of the capitalist function some writers disagree with this view arguing that management “is not a labour process in the more precise
usage of Marx and Braverman” (Armstrong 1989, p. 308). The Brook-Bolton debate within LPT offers a wide spectrum to appreciate that it relates specifically to emotions at work. Whereas Brook (2009a, 2009b) offers a broadly Marxian approach to LPT arguing that the material and commodity status of labour is universal and widespread across the economy of feelings. Bolton (2005, 2009) combines LPT with a more interactionist perspectives and considers people’s emotions at work to be multi-dimensional and transcending the labour processes. This paper aligns with the Bolton side of the debate. Whereas, Brook (2009a) focuses on the broader conditions of the political economy; Bolton (2009) argues that while emotional displays are sometimes regulated by employers, they are often self-generated, complex and distinct, as well as ‘unproductive’ from the point of view of the employer. This ties in well with work-life balance and the role that technology may play. Vincent (2011) illustrated the Brook-Bolton debate succinctly. He stated that following Brook, it will be argued that employers’ perceptions of workplace emotions are likely to be influenced by their ‘higher’ interests, regardless of the types of emotion displayed or the subject’s experience of those displays. Whereas following Bolton, it will be argued that outcomes can only be explained if analyses are sensitive to local experiences and how these differentially connect agents to the structured relations they embody (Vincent, 2011, p. 1370).

The role of technology in the labour process is remarkable, underlining the importance of technology as an important change agent in terms of how, when and where jobs are undertaken (Lewis, 1996). Labour process alerts us to ways in which new technology is developed and adapted at work (Littler, 1990). However, new technologies have created new ways of intensifying work and new ways of contracting between labour and capital, which focus on
contingent or flexible labour and the disintegration of bureaucratic firms (Smith, 2016). This study presents MITDs as a new aspect of technology and discusses their impact on WLB. The issue of boundary-spanning raised by the use of technology in this paper is beyond previous debate on LPT. It introduces a new perspective where the use of MITDs might be accelerating permeability between the boundaries of work and non-work. At some point in the 1990s the use of technology was associated with surveillance. MITDs would surely be such a technology.

This study is mainly guided by border theory and regards the family domain as the non-work domain. Border theory is used to examine the impact of technologies (MITDs) on the border between work and non-work domains. The term “border” and “boundary” are used interchangeably throughout this article to mean the demarcation between work and non-work domains. Various disciplines such as organisational studies have used border and boundary theories to examine and understand certain phenomena (Kreiner, Hollensbe and Sheep, 2009). Organisational theorists have used boundary theories in different spheres of their discipline; for example, in terms of organisational relations (Bertrand, 1972), intergroup relations (Yan and Louis, 1999), boundary spanning behaviour (Verbeke and Bagozzi, 2002), knowledge transfer (Carlile, 2002), and work and family interface (Ashforth, Kreiner and Fugate, 2000; Clark, 2000).

Border theory has been used to explain phenomena at either an organisational or individual level. According to Clark (2000, p. 756), borders are “conceptualised as the lines of demarcation between domains…they are used to define the point at which domain relevant behaviour begins or ends”. Ashforth (2001, p. 262) defined boundaries as “mental fences used to simplify…the environment”. In short, boundaries are gateways into work and non-work domains (Mathews and Barnes-Farell, 2010). They are “physical, emotional, temporal, cognitive, and/or relational limits
that define entities as separate from one another” (Ashforth, Kreiner and Fugate, 2000, p. 474). Border theory, in relation to WLB, was discussed in Hall and Richter’s (1988) work about balancing work and home lives. The theory was further developed by Nippert-Eng (1996) and Ashforth, Kreiner and Fugate (2000) and has since been expanded into testable propositions by other researchers such as Clark (2000). One of the propositions of border theory is the notion of two different domains of work and non-work (Golden and Geisler, 2007) and how employees create boundaries around these two spheres in a specific fashion (Bulger, Mathews and Hoffman, 2007). According to Nippert-Eng (1996), some employees mould the boundaries around their work and non-work lives and ensure that the two domains are segmented from each other, while others construct boundaries that can be integrated. Furthermore, Nippert-Eng (1996) posits that border segmentation or integration depends on individual idiosyncrasy and preference, family members in the non-work domain, type of occupation, and attitudes of co-workers (also discussed by Knapp et al., 2013).

There are three main types of borders: (a) the physical borders that define where domain-relevant behaviour can take place, such as the location of paid employment; (b) the temporal borders that separate when tasks should be done, for example working hours; and (c) psychological borders which define what thinking patterns, behaviours, and emotions are suitable to what domain. However, it is essential to note that borders differ in terms of strength, flexibility, and permeability. When there is a high level of permeability and flexibility, blending eventually occurs (Clark, 2000; Speakman and Marchington, 2004). In summary, the idea of a border between two domains allows for independent and differentiated movement between work and non-work domains. Employees understand the circumstances that dictate the possibility, timing, and frequency of such movements (Ashforth, Kreiner and Fugate, 2000). This reflects
Zerubavel’s (1991) description of boundary crossing as a cognitive movement between categories and Lewin’s (1951) description as movement across a bridge. The potential permeability and crossing among the major domains – work and non-work is illustrated in Figure 1. This demonstrates the role of technology in the cross-over between domains. From a theoretical perspective, therefore, this study seeks to investigate the impact of technology, specifically MITDs, on the border between employees’ work and non-work domains.

**Figure 1: MITDs and the Employees’ Movements across the Border**

Methodology
Given the paucity of empirical studies on the role of MITDs on employees’ WLB, a qualitative, interview-based method is considered to be the most appropriate method for this study. A qualitative research method helps to develop an in-depth understanding of the meanings and perceptions of a given phenomenon. In addition, the qualitative research method provides rich insights into issues of great importance and allows respondents to give a detailed account (Cassell, 2009), thereby giving researchers the opportunity to evaluate how varied individual experiences are influenced by a given phenomenon. Furthermore, only around 10% of the extant studies on WLB have used qualitative methods (Eby et al., 2005) and researchers have called for
the use of more qualitative and mixed methods in the study of WLB (Neal, Hammer and Morgan, 2006).

Sample
Respondents were selected from two banks and two universities in the city of London. Academic work in the UK has seen many changes over the past two decades, following demands for a customer- oriented approach to teaching and learning, thereby exacerbating the challenges of achieving WLB (Kinman and Jones, 2008). Despite advances in technology, some aspects of teaching and other forms of meetings require a person’s physical presence at work. Nevertheless, technology facilitates a great deal of the work involved in teaching, attending meetings, and conducting research without requiring the person’s physical presence at work. Given that banking involves strict adherence to corporate governance and regulatory issues (Mordi, Mmeh and Ojo, 2013), the demands on WLB have also increased. A comparative study undertaken by Moore (2005) showed that German workers were better at maintaining WLB than their British colleagues. Banking duties are varied, and despite that some aspects of banking work may require a person’s physical presence at work, there are others aspects of the work which are better supported using technologies.

This is, however, probably not to the same extent as what may be required and supported in academic work. There are some differences and similarities between work pressures in the academic sector and the banking sector. Anecdotally, both sectors also have a good gender balance. As shown in Table 1, we sought to explore how marital status, gender, and sector differences could, if at all, influence WLB. Therefore, we draw on previous studies which evaluate the WLB challenges among academics and bankers separately in order to examine the extent to which the differences and similarities in WLB challenges between these sectors could
be influenced by MITDs. The initial empirical sample led to a more robust sample by means of snowball sampling. The names of the respondents and their places of work are presented as pseudonyms to fulfil our promise of confidentiality to them. This sample has been chosen because British employees emphasise and value the ability to have a “balanced life” (Na Ayudhya and Lewis, 2011; Sturges, 2008; Sturges and Guest, 2004). In addition, they demonstrate a high degree of technology readiness. The technology readiness index (TRI) is the “people’s propensity to embrace and use technology to accomplish goals at home and at work” (Parasuraman, 2000, p. 308).

Data Collection and Analysis

A total of 42 respondents (21 university lecturers and 21 bankers, profiles shown in Table 1) were interviewed at different times and locations in order to minimise the possibility of bias. Open electronic invitations were sent out to the academic staff members and consenting members were those who were finally interviewed. In terms of the respondents from the banks, previously established contacts were utilised to solicit respondents’ consent for the interviews. These two sectors were chosen as both academics and bankers work long hours and encounter WLB challenges. In addition, in order to avoid bias, respondents were not selected from any of the universities where the authors worked.

Our sample also achieved a good balance with regards to marital status and gender with the aim of further reducing bias. As indicated above, having an empirical focus on two sectors (the financial industry and higher education) gives us the opportunity to compare and contrast possible similarities and differences between them. Since the vast majority of respondents are married with children and live what Kreiner et al. (2009) described as “traditional” family lives, we expect that the findings could be applicable to employees in other sectors. A “traditional
family” life is a family support system which involves two married individuals providing care and stability for their offspring and other family members. Therefore, their experiences in terms of familial duties and demands would be expected to be largely similar. The semi-structured interviews allowed the experiences of the respondents to be explored seamlessly, giving the interviewer the opportunity to probe for deeper understanding and clarification. The interviews were conducted in English and the duration of the interviews ranged from 30 to 60 minutes. With the exception of seven respondents, all interviewees agreed that their interviews could be audio recorded. The recorded voices were carefully transcribed and meticulous notes were taken in the case of the seven respondents who declined permission to record their interviews.

The transcripts were read several times in order to gain a holistic understanding of the interview discussions with the 42 respondents. Given that theorising in inductive research usually occurs both during and after the collection of data (Patton, 2002), we started open coding while collecting data. The responses were independently coded using a coding scheme which had emerged over time. We placed portions of text (e.g. a phrase, sentence, or paragraph) into broad codes. This broad coding, following theoretical sampling methodology (Corbin and Strauss, 2008) allowed the researchers to identify major emerging themes.

This research employs grounded theory techniques (Glaser and Strauss 1967; Strauss and Corbin 1998) in the data analysis. As Strauss and Corbin (1990, p.19) noted, grounded theory and other qualitative methods “can be used to uncover and understand what lies behind any phenomenon about which little is yet known…it can be used to gain novel and fresh slants on things about which quite a bit is already known”. This type of grounded theory approach was also used by Kreiner et al. (2009). Furthermore, phenomenological coding and analytical procedures for the semi-structured interviews were undertaken manually - without the assistance of computer
programmes. Content analysis was also employed in the analysis of the data so that the researchers could methodically examine the data (Murphy and Doherty, 2011).

### Table 1: Respondents’ Profiles

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<td>6</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Solid Bank</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>4</td>
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<td><strong>Subtotal</strong></td>
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<td><strong>11</strong></td>
<td><strong>13</strong></td>
<td><strong>8</strong></td>
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<th>Lecturers</th>
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<td>Private University</td>
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<td>3</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Stamp University</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>13</strong></td>
<td><strong>8</strong></td>
<td><strong>15</strong></td>
<td><strong>6</strong></td>
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Cumulatively, 49 per cent of the respondents were female and 51 per cent were male. The main age bracket is 25-55 years old.

### Findings

The broad emerging themes were work-life border shift, MITDs as “role integrators”, and the advantages and disadvantages of MITDs with respect to the achievement of WLB. Three key themes were identified: the movements and shifts in borders; three positive impacts of MITDs on employee WLB; and three negative impacts of MITDs on employee WLB.

### Movement between Work and Non-Work Domains

The first finding relates to the shift in the border that exists between employees’ work and life (non-work) domains. The respondents reported that MITDs enable them to work anywhere away from the office premises. Office work is regularly carried out on the bus, on the train, in cafés, at home, and in taxis. This working pattern is the hallmark of the 21st century and has blurred the border that exists between employees’ work and non-work domains. Respondent A reported that:
MITDs enhance a smooth and continuous working hours...for example, I started working this morning as soon as I boarded the cab. I turned on my laptop and started reading and responding to my emails. Sometimes, I quickly make or respond to telephone calls (all work-related). On the other hand, I can also respond to non-work related issues while at work - something which would not have been possible without MITDs.

Another respondent said:

*I am able to make and receive business telephone calls anywhere, even in my bedroom...for me, everywhere is my office, provided I have my laptop and mobile phones with me (Respondent D).*

These two quotes typify how blurred the borders between work and non-work periods can become. The chance to work anywhere could, inadvertently, lead to working too many hours in the day, but also allow individuals to deal with non-work issues simultaneously. In terms of the academic respondents, MITDs enable them to log on their institutions’ virtual environment, using Internet facilities to access library materials, receive and respond to emails and attend to other academic-related activities. Other respondents said:

*MITDs enable me to work from home or anywhere, as long as my iPad and Blackberry phone are with me. For example, I was traveling last week and I was marking my students’ coursework as I was seated in the bus...and I was also able to attend to my family at work. For example, yesterday I was talking to my wife and children on mobile facetime at work...MITDs make work possible at home and allow me to attend to familial or other non-work related issues at work (Respondent Q).*

*The slogan used to be “work at work and relax at home”, but now people work at work and still continue working while at home. For example, I found myself replying to emails and responding to online queries from my staff and customers while at home. For me, no border exists between work and home domains anymore because MITDs such as laptops, Blackberry, iPhone, iPad etc. have destroyed the border” (Respondent P).*

This finding aligns with Figure 1 above which shows that MITDs have rendered the border hugely porous such that non-work issues can be attended to in the work domain and vice-versa. Basically, with MITDs, work can now be done anywhere and at any time. It also emphasises that
MITDs have increased the ease and frequency of movement across the borders between work and non-work domains. This phenomenon raises novel issues about employees’ border crossing and border management. Furthermore, employees’ ability to work anywhere and at any time with the help of MITDs portrays the majority of the respondents as role “integrators”. The statements above represent the majority (92%) of the respondents’ views and experiences. Therefore, the hitherto distinct performance of work roles and family roles have changed significantly as a result of the improved sophistication of MITDs. Arguably, for some roles, border crossing occurs so smoothly that there appear to be no barriers (represented by the broken lines). This ease of movement could have both positive and negative effects on employee WLB.

**Positive Impacts of MITDs on Employee WLB**

Our findings reveal that the positive impacts of MITDs on employee WLB include flexibility, attending to work and non-work issues in a timely manner, and potential health benefits.

**(a) Flexibility**

It is clear from the responses that the use of MITDs provides a wide range of benefits for the respondents. The respondents spoke of the flexibility that is associated with MITDs’ ability to help them achieve WLB. One respondent reported that:

*MITDs such as my Blackberry phone, my very portable laptop, and my iPad make my life easy and far better now - unlike before. I don’t have to stay in the office until midnight anymore. I can close at the normal closing time and keep working in the car as the driver drives me home (Participant A).*

This view is shared by 80% of the respondents.

Other respondents said:

*The flexibility that comes with MITDs is fantastic...whatever is missed or left undone at work can be attended to in the car when I am going home or later at home...Also, I am able to attend to familial issues at work or even somewhere else...really helps balance work and non-work roles...the flexibility is amazing” (Respondent H).*

This view is shared by 94% of the respondents.
MITDs, especially my iPhone and iPad allow me to do a lot of things outside the University environment. I can attend to my students’ queries via BBM, WhatsApp, or Yahoo Messenger. I can also attend to my emails and do other academic and administrative work even while on holiday (Respondent M).

This view is also shared by the majority (87%) of the respondents (lecturers).

The respondents reported the beneficial effects of MITDs on their work and non-work lives and how such devices help them achieve WLB. According to the respondents, MITDs ease the tension and problems of balancing the demands and responsibilities of two mutually exclusive realms: work and non-work. The above statements show that there is a high TRI among British employees. Although the usage among the respondents varies from one individual to another, an overwhelming majority (96%) of the respondents use (at least) one MITD in order to attend to work-related issues when they are not at work and to attend to familial and other non-work related issues while they are at work. This has afforded them a locus of control and flexibility over where, how and when they do their work.

(b) Attending to Work and Non-Work Demands in a Timely Manner

An overwhelming majority (90%) of the respondents stated that MITDs make working easier for them. Employees describe the old, rigid system of work in which all work activities are carried out at work as more demanding. MITDs allow employees, while they are with their family at home or travelling by car, train, or aircraft to continue their work with ease. The following statements highlight the employees’ views of MITDs with respect to working with ease:

_I can sit at home (in fact, I do this quite often), log on to the company intranet on my laptop, sometimes on my iPad, and start working. I use a mobile phone to communicate with my subordinates and they report to me online via the company intranet. It is easier working this way and I also have time to attend to other non-work related issues (Respondent C)._ 

_Unlike the old method, students now submit assignments and course work online. I mark it and upload their results online for their view. I respond to emails anywhere and at any time and my_
students can reach me online for any question or queries about their courses at any time they wish to do so. This apparently makes my work easier to do (Respondent M).

It is very easy...the fact that work can be done anywhere with MITDs make working enjoyable (Respondent L).

These views are shared by the majority (90%) of the respondents. MITDs ease the competing and contradicting responsibilities of work and non-work lives. It is essential to note the homogeneity of the respondents’ responses in terms of the beneficial effects of MITDs on their work and non-work lives. The respondents (male and female) reported that MITDs make work easier for them and allow them to keep up with work “on the go”.

(c) Potential Health Benefits

Some respondents (58%) commented that MITDs enhance good health and general wellbeing. This theme was common among female respondents, who described MITDs as “health enhancers”. Employees have different responsibilities outside their work and they require adjustment to their work-related duties in order to accommodate other non-work obligations. For the respondents (58%), of whom the majority (76%) were female, this adjustment can be stressful and have huge implications on their health. However, MITDs ease the difficulties in these adjustments and make the employees’ lives less difficult.

Since I can work from home, I don’t have to be at work at all times... I do most of the things from home...I receive instructions from my manager and follow them to the letter...it makes my mind peaceful and my body healthier (Respondent B).

Something that always troubles my mind and sickens me is my inability to attend to my children and family...with MITDs, my mind is at peace because my resumption and closing time can be altered to attend to my familial issues and I can finish up my work later at home by simply logging on to the company’s website...I don’t have to rush home to do anything and my mind and body are at peace (Respondent U).

For some respondents, this subject involves spending more time at home relaxing with their families and loved ones. In other words, it means less time at work specifically, their physical
presence at work diminishes while their physical presence at home increases. This is often considered personally beneficial.

**Negative Impacts of MITDs on Employee WLB**

On the other hand, extended working hours, intrusion into family and other non-work activities, and a potential threat to good health were common concerns in the accounts of the respondents and these considerably prevent them from achieving WLB. Furthermore, 42% of the respondents cited the potential negative impact on health as a major concern.

(a) Extended Working Hours

The majority of the respondents (94%) reported an extension to their contracted working hours. The respondents commented that the presumed closing hours of work are not only artificial and a mere extension of working hours in another venue, but also a source of work-life imbalance. An associate professor described MITDs as electronics equipment which always keep employees’ in working mode, specifically that:

> The problem with MITDs, for me, is that I never stop working even after the normal office hours. I work on my laptop as my driver drives me home, extend the work into my home...in fact, I work anywhere I have my portable laptop or iPad with me. At least I put in an average of 25 extra hours every week. This really is affecting my WLB...I always find work intruding into my personal life (Participant P).

This statement shows that the user-empowerment of MITDs has transcended the traditional deterministic paradigm. Employees are not desk-bound to a particular location: they are moveable and mobile. MITDs allow employees to continue working anywhere and at any time.

Another respondent said:

> My iPad, laptop, and iPhone extend my working hours beyond the walls of my office...I receive calls from work regarding work-related issues, I give instructions to my staff and they are free to call me for clarification or further instructions (as the case may be)
at any time of the day and night. Also, I am expected to respond to my emails almost immediately because most of them must be dealt with as soon as possible...on average, I put in 15 extra hours weekly. Mind you, all these extra hours of work are not paid for and they affect my non-work life” (Respondent M).

A lecturer stated that:

You cannot have your cake and eat it at the same time...MITDs will give you flexibility and allow you to work anywhere and anytime, but they take away your WLB because you find yourself working at anytime and anywhere, as simple as that...on average, I work more than 20 extra hours every week (Respondent T).

MITDs keep respondents working at any available time and place away from their places of work and outside their contractual working hours. Every respondent consented to working outside of their working hours (this, at least, involves checking emails, but some respondents are required to respond to emails and other work-related messages). The extended working hours, as a result, create an imbalance in the respondents’ work and non-work lives.

(b) Intrusion into Family and Other Non-Work Activities

Generally, the respondents’ experiences with MITDs in terms of their relationships with their families were rather unpleasant. It is important to note that the majority of the respondents (92%) are married with children. An extension of work into the family domain was found to cause many conflicts and unhappiness in the family.

A married woman with two children said:

This demerit aspect of MITDs is worrisome. It allows work to intrude in my family life. My wife always complains about me coming back from work and still working on my laptop or iPad...one time we had a serious argument about my bringing home work...she was talking to me about my son and I was not giving her the desired attention because I was on my iPad replying to an email (Respondent W).

Regarding other life activities, respondents commented on how MITDs seize and divert their attention from other life activities and temporarily put them in work mode. A respondent noted:

Honestly it is sad how these devices (MITDs) can hijack your time and attention and put you in work mode. For example, last Sunday, I was in church listening to the sermon,
my Blackberry signified that I have a message. I checked it and it was from my manager...before I knew it, I found myself replying to emails throughout church time because she kept sending messages which I had to be responding to. For me, my mobile phone (Blackberry) and laptop are causing a massive imbalance in my work and non-work lives, because these devices follow you everywhere (Respondent C).

Another respondent noted that:

MITDs are “mobile offices” which follows me around, I find myself working anywhere (in the house, in church, social gatherings or even on the road)...with MITDs, everywhere, for me, is a workplace (Respondent S).

Respondents found themselves working at home when they should be spending quality time with their families. Regarding the intrusion into their private lives, the respondents’ responses were similar. However, one respondent summarised this challenge aptly:

Private life? I don’t have one. I work in a mergers and acquisitions department. I work for long hours and, when I am not at work I am always on either my Blackberry or laptop attending to work-related issues (Respondent Y).

The majority (91%) of the respondents described MITDs as an extension of the office desk. Consequently, they experience intrusions into their private lives.

(c) Potential Threat to Good Health

Despite that, as indicated above, MITDs can have potential benefits to employees’ health in terms of allowing people to get work done without requiring them to come to work, there is the possibility of failing to take breaks from work. Such constant attention to work without a break could potentially adversely affect one’s health. Many respondents (42%) commented that MITDs put pressure on them (in terms of the lengthy working hours), which threatens their health and general wellbeing. Employees continue working (either on their laptops, iPads, smartphones, and other devices) even when they are away from their workplaces. Consequently, they become tired and worn-out. One respondent indicated that:

It is really tiring. I am always working...either on my Blackberry or laptop. I get really tired and worn-out. Seriously, it is affecting my health (Respondent X).
Furthermore, addiction to the use of painkillers and other analgesics is evident in the accounts of this group of respondents (42%), who commented that MITDs threaten their health. One respondent expressed this issue as follows:

*With my laptop and iPad, there is no closing time – I am always working. My health is suffering as a result... I move around with painkillers in my suitcase (Respondent Z).*

Another respondent said:

*I live on painkillers and energy drinks in order to stay strong and alert. I don’t get enough rest at home as I always work on my laptop or iPad...it is indeed tiring. I am now very concerned about the health implications because I have been warned by my doctor to reduce my intake of painkillers and energy drinks...but they get me going (Participant R).*

MITDs have fundamentally negative effects on these respondents’ health. This is because MITDs always keep them working. Consequently, the majority (89%) of the respondents (this group) resorted to the excessive use of painkillers and/or energy drinks in order to stay strong and alert. Clearly, this is a threat to the respondents’ health and wellbeing.

**Discussion**

This study investigated the role of MITDs in relation to employees’ WLB. ICT has become indispensable to the development and survival of almost everything in the present era. In fact, no meaningful development will be recorded without it (Currie and Eveline, 2011; Maheshpriya and Sreelal, 2013). This situation has forced organisations and employees to be more technologically inclined, leading to an increased use of mobile technology. However, the extant literature on MITDs and WLB lacks a cohesive approach to understanding the comprehensive roles of MITDs on employees’ WLB. This study explores how MITDs could enhance employees’ WLB or exacerbate employees’ work-life conflict. The findings reveal the merits and demerits of MITDs in the context of employees’ WLB and provide the foundations for a theoretical shift. The
empirical evidence from this study reveals that flexibility (the core tenet of WLB) remains one of the outstanding benefits of MITDs in terms of WLB. In line with the extant literature, (Galea, Houkes and Rijk, 2014; Sharpe et al., 2002), the present findings demonstrate that flexible working patterns are essential in achieving WLB. The findings also suggest that MITDs provide the flexibility that enables employees to work literally everywhere and at all times. In other words, the ability of employees to achieve WLB relies on their ability to work flexibly and without being office-bound. The majority of the respondents revealed that MITDs provide them with the flexibility needed to balance their work and non-work lives. This is consistent with the view of Currie and Eveline (2011), who argued that mobile technologies ease the tension between the two mutually exclusive realms (work and non-work domains). Instead of spending a whole day in the office, employees can be outside the office attending to non-work related issues while still undertaking the required volume and quality of their daily work. This often results in work becoming easier and more accessible while simultaneously improving the employees’ physical and mental health. Overall, it enhances WLB.

However, not all of the influences of MITDs on WLB are positive. For example, there is likely to be a significant increase in the number of working hours due to the use of MITDs. Since MITDs allow employees to work anywhere and at any time, work is transported into the non-work domain, thus lengthening employees’ working hours without the benefit of additional remuneration. In essence, MITDs can keep employees at work at all times (Jung, 2013; Middleton and Cukier, 2006), albeit indirectly. This phenomenon constantly affects people’s non-work activities, strains their family relationships, and resonates with Parkinson’s (1996) argument that employees who work at home face the risk of receiving complaints from family members. This is because employees often find themselves in a continuous working mode when
they should be spending time with their families and on other activities such as religious, recreational, and social activities. The use of MITDs has negative implications on the respondents’ health and wellbeing. This may have a huge effect on employees’ concentration and performance at work. Another plausible argument on the negative implication is the excessive usage of MITDs and the extent to which they may become a tool of management, either as an indirect surveillance, a monitor of level of engagement, or indeed micro-managing time spent on work. This may be exacerbated by the growing ownership of MITDs.

This study also highlighted the effects of MITDs on the border between work and non-work domains. The study argues that MITDs have succeeded in rendering the border between work and non-work domains less well defined and more pervious. Furthermore, the empirical evidence from this study invalidates Kahn et al.’s (1964) notion of the separation of work and home roles. This is because, with MITDs, employees are able to work almost anywhere including at home and while commuting on a bus, train, and aeroplane. In line with the extant literature, MITDs have blurred the boundaries between work and non-work domains (Duxbury and Smart, 2011; Eikhof, Warhurst and Haunschild, 2007; Golden and Geisler, 2007; Prasopoulou and Pouloudi, 2006; Shumate and Fulk, 2004), hence making them overly permeable. This study notes that the perceptibly porous borders exacerbate work-life imbalance. Furthermore, this study suggests a re-examination of work-life border theory, especially in terms of its application to the workplace, given the fluidity and imminent disappearance of the hitherto thinly specified borders.

**Implications for Theory**

The basis of border theory is to depict demarcations and suggest areas or clear partitioning between different spheres (individual or organisational), even when they are somewhat related. The findings from the present study question border theory’s notion of distinctive work and
family domains. Work related and non-work related activities are no longer bound to a specific
domain. This has significant implications for the application of this theory in work and non-work
domains. As noted by Kreine et al. (2006), boundaries separate domains from each other yet
facilitate and/or constrain how domains are connected and related. However, MITDs have
changed the way in which work is done and business is conducted (Tennakoon, da Silver and
Taras, 2013). Nowadays, the methods of carrying out daily work are no longer limited to a
particular place or time (Duxbury and Smart, 2011). The latest mobile and other integrated
wireless devices and super-fast internet have, invariably, blurred the boundaries that separate
work and non-work domains since work can take place anywhere and at any time.

Consequently, MITDs have shifted the perception and understanding of work and personal life
constructs in terms of space and time. The popular view of “the family domain as a place of
refuge, leisure, and entertainment” (Shumate and Fulk, 2004, 56) in which employees are “free
from outside expectations and surveillance” (Pica and Kakihara, 2003) has also shifted. This is
because MITDs make it possible to undertake more work at home and to carry out personal tasks
or attend to family and non-work issues while at work. The critical point of note in the overlap
and permeability of border theory, therefore, is that its value is beyond the likely but narrow
view of undertaking work at home. Rather, it also considers the plausibility of attending to
personal matters while at work. It is the practicality of this simultaneity that is particularly
appealing.

Another related theoretical implication of this study is that the findings suggest that MITDs have
turned most employees into role integrators and this makes it difficult for them to operate as role
separators. This study, therefore, provides key insights into employees’ activities in the work and
non-work domains, and the impact of MITDs on the movements between these two important

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domains. Furthermore, this study provides actionable knowledge which could help employees and employers to re-examine WLB issues thereby supporting WLB while minimising work-life conflict.

**Implications for Practice**

With specific reference to managerial practice, the blurring of the demarcation between work and non-work domain suggests that management policies should go beyond the confines of the workplace to strategically consider familial and related non-work issues which may impact work performance. It is evident from this study that MITDs have rendered the border between work and non-work domains porous. This phenomenon has proven to be problematic for employees in terms of drawing a temporary boundary between activities in the work and non-work domains. This often results in extended working hours, which can strain employees’ relationships with their families. Furthermore, lengthened working hours may render employees physically and mentally tired, which negatively affects their job performance.

Equally, from the perspective of employees, a strained personal non-work relationship could adversely affect their work performance. The implication, therefore, is that employees need to proactively and consciously seek to ensure a good balance when they attend to their work and non-work commitments since the permeability of the two domains can easily be overlooked.

Multiple positive outcomes of successfully managed work and non-work domains have been documented, such as increased creativity, loyalty, and commitment (Madjar, Oldham and Pratt, 2002; Pratt and Rosa, 2003). In sum, an understanding of work and non-work duties and devising actionable tactics for managing them would move employees closer to achieving the elusive but needed WLB while minimising work-life conflict. Furthermore, human resource practitioners should seek to implement policies and practices to ensure employees’ WLB, although employees
can continue to work outside the workplace. The extent to which such work is done needs to be monitored and managed to ensure that while productivity is being enhanced, there is a limited negative impact on other non-work related demands. Organisations should proactively promote policies to encourage employees to periodically “switch off” from their work to allow them to rest and give attention to their non-work activities.

Future Research
This study has sought to shed light on the possible effects of MITDs on WLB. Although the empirical focus has been on capturing views from a single city with respondents from a wide range of cultural backgrounds, future studies could be more extensive across cities and perhaps sectors. This could enrich our understanding of the phenomenon.

In addition, there are likely to be differences across industries and a comparative inter-industry study would provide greater understanding as to whether MITDs affect different industry sectors in different ways in terms of productivity and WLB. The present efforts equally provide the opportunity of verifying these findings in terms of how similar or different they are to other work contexts in other cultures and contexts especially non-western developing countries. A mixed-method research methodology may also provide stronger and more generalisable findings.

Conclusion and Recommendations
This study has presented the roles of MITDs on employees’ WLB and contributes to the extant literature on WLB and MITDs. The findings reveal both positive and negative effects of MITDs on employees’ WLB. The study has also highlighted the effects of MITDs on the boundaries between work and non-work domains. MITDs provide employees with the flexibility needed to balance their work and non-work obligations and, at the same time, act as a catalyst which engenders work-life conflict. MITDs allow employees to work at anytime and anywhere. Despite
the benefits, MITDs often lengthen employees’ working hours and can disengage and strain familial and non-work activities. This study also emphasised the reality of “boundaryless” and “borderless” work domains and consequently advocates a re-examination of work-life border theory. The findings from this study provoke a debate on MITDs and WLB and work-life conflict. The need for employees, employers, trade unions and other relevant stakeholders to re-examine the positive and negative influences of MITDs on both short- and long-term productivity as well as WLB is urgent. Perhaps this border permeability and its consequences for work and non-work lives may equally interest health practitioners and their institutions as this emerging phenomenon demonstrates more direct and indirect impacts on employee’s lives. This is particularly important because employees flourish when their organisations help them focus on what matters the most not only at work, but in all aspects of their lives – at home, in their communities, and in their pursuit of physical, emotional, and spiritual wellbeing (Whittington, Maellaro and Galpin, 2011).

References


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