Developing a Framework for Electronic Engagement at Work: A Phenomenological Study

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ABSTRACT

Several electronic-engagement-related questions arise at work due to the beginning of a new era of social distancing, lockdowns, quarantining, and sanitization. These terms were not so common before. What challenges do employees face while working from home? Why do they face those challenges? How are they overcoming these challenges? In summary, in a work-from-home setting, what are the issues and solutions in engaging remote workers electronically? To answer these questions, 23 information technology (IT) employees in India and four in the United Kingdom were interviewed, and data were analyzed using interpretive phenomenological analysis (IPA). A few information technology employees from the United Kingdom were also interviewed to ensure the transferability of the results. Along with a few suggestions, six challenges emerged. These may help employers formulate their electronic engagement strategies for employees in a better manner.

KEYWORDS
Electronic Engagement, Engagement at Work, India, Information Technology

INTRODUCTION

The ongoing circumstances of maintaining social distance have forced companies to shift their on-campus activities online to the extent possible (The Economist, 2021; Lund et al., 2021). According to a survey from Enterprise Technology Research, many organizations have increased the permanent work from home as much as twice what they expected before the CoVID 19 pandemic (Castrillion, 2020). According to recent reports in international magazines and newspapers, several companies, particularly information technology companies including Microsoft, Tata Consultancy Services (TCS),...
Facebook, and Twitter, have either proposed or implemented their permanent work from home plans for most of their workforce (Kelly, 2020; ETHRWorld, 2021).

In 2021, TCS claimed to have 25 percent better productivity with work from home (Das, 2021). While prima-facie it appears to be a win-win situation for employers and employees, preliminary studies paint a different picture (van der Lippe & Lippényi, 2020). It has been argued that compared to physical meetings, engaging employees physically, emotionally, and cognitively online (popularly known as electronic engagement) is challenging. It has consequences on employee performance, whether good or bad (Wang et al., 2021; Kim & Ausar, 2018). Studies relating to electronic engagement and its forms such as brand engagement, citizen engagement, and user engagement are in plenty (see Chang et al., 2021; Rouibah et al., 2021; Ifinedo et al., 2021; Rivera-Trigueros & Olvera-Lobo, 2021; Vakeel & Panigrahi, 2018) but relating to work are sparse, the area that our study proposes to explore.

There are a few scholars who studied the behavior of office returnees. For instance, a recent investigation by Samuel (2021) to find out the changes that have come in employees’ behavior post-work from home reveals a lack of trust in the employer, feeling surveillance unnecessary, etc. These questions pertain to the employee’s challenges while with an only electronic medium of interaction and connectivity, and know-how of limitation of investing physical, emotional, and cognitive resources into work only electronically affecting employees’ engagement levels. However, studies answering the core questions about IT employees’ electronic engagement in India are sparse (Gupta, Kar, & Jebarajakirthy, 2021). India, a global Information Technology (IT) hub, attracts multi-national IT companies, making it a suitable venue for an IT-related study (Bala Subrahmanya, 2017; Thomas, 2021). To make the results of this study relevant to the global audience, we also conduct depth interviews of IT workers living abroad, United Kingdom. Inclusion of a developed country in the study not only helps increasing the scope of our study but also enhancing transferability of our study results.

Specifically, the following are the three key research questions that need to be answered: (1) What challenges do employees face while working from home? (2) Why do they face those challenges? (3) How are they overcoming these challenges? Thus, the overall objective of the present paper is to explore the challenges faced and possible remedies proposed by the IT employees in India to engage themselves electronically in the work while working remotely.

LITERATURE REVIEW

e-Engagement

The engagement at work literature is plagued with conceptually and operationally overlapping terms when engaging employees via non-physical means such as online engagement, electronic engagement, virtual engagement, and internet engagement (Gupta & Shukla, 2018). All these types of engagement appear the same, but they are conceptually distinct. For this study, it is essential to distinguish e-engagement from all types of engagements.

Online engagement is often confused with e-engagement. However, there is a thin line of difference in their conceptualizations. As defined in a study by Redmond et al. (2021), online engagement is a collection of various types, dimensions, or aspects of engagement. The most commonly mentioned is cognitive, emotional, and behavioral engagement. It is, to a great extent, appears to be a general conceptualization. Another definition specific to the online phenomenon is by Bonson and Ratkai (2013), as Arumsari and Setiawan (2021) mentioned. Online engagement refers to the “psychological condition of a user, which is categorized by the user’s interaction, and co-creative experience with an agent and objects” (Arumsari & Setiawan, 2021, p. 126). Indeed, online engagement seems to do specifically with the internet, but it may not be necessary for e-engagement.

One of the precise most definitions of e-engagement is by Chen (2007). According to it, in the context of the public sector, e-Engagement is “the use of Information Communication Technologies (ICTs) by the public sector to improve, enhance and expand the engagement of the public in policy-
making processes” (p. 14). Here, ICTs could be telephone, mobile phone, fax, with services such as the internet. Other concepts such as digital and internet engagement appear to be similar to online engagement. For instance, Bowen (2013) defined digital engagement as an organization creating active and interesting relationships with publics using Internet channels, such as product endorsements by prominent bloggers” (p. 119). Similar is the definition of internet and virtual engagement. It is clear from these definitions that e-engagement encompasses virtual, online, internet, and digital engagements and non-digital electronic engagements.

Substantial overlaps among the online, internet and electronic engagement concepts necessitate us to limit the scope of e-engagement for this study. For that cause, e-engagement may be defined as individuals’ physical, emotional, and cognitive engrossment in an electronic (via wired or wireless instruments) environment. Past studies have used the job demand-resource model to understand the challenges and resources that may affect an individual’s engagement (Mauno et al., 2007; Breevaart & Bakker, 2018; Shankar et al., 2021; Ilie & Sneha, 2018; Behl et al., 2021).

**Job Demand-Resources Model**

Based on the assumption that characteristics of any organization can be broadly divided into job demands and job resources, Bakker et al. (2003) introduced the Job Demand-Resources (JD-R) model. In that, job demands include “physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort and are therefore associated with certain physiological and/or psychological costs” (Schaufeli & Bakker, 2004, p. 296). According to the prior studies, high demands are a source of occupational stress. These high demands may thus reduce the positive outcomes of resource support. Termed as ‘job resources,’ these resources collectively encompass job-related physical, psychological, social, or organizational aspects. To qualify as a job resource, a resource has to be instrumental in achieving work goals, decreasing job demands and related physiological and psychological costs, and enhancing personal growth and development. These resources may belong to the organizational or interpersonal level, work arrangement, or task level (Schaufeli & Bakker, 2004).

The JD-R model has been used extensively to explain the changing levels of work engagement. For example, in support of personal resources positively impacting engagement at work, Bakker and Demerouti (2008) argued that “engaged workers possess personal resources, including optimism, self-efficacy, self-esteem, resilience, and an active coping style, that help them to control and impact upon their work environment successfully, and to achieve career” (p. 214). The authors also argued that “Job resources are assumed to play either an intrinsic motivational role because they foster employees’ growth, learning, and development, or an extrinsic motivational role because they are instrumental in achieving work goals” (p. 211).

However, in the times of work from anywhere, work from home, remote working, and remote working, communication via electronic means has become common and a necessity. Therefore, it is of paramount importance to explore the exact job demands and resources that may affect e-engagement. The factors of e-engagement are likely to be different from non-electronic ones because e-engagement can have a whole set of different job demands in the form of challenges presented by the external yet electronic environment. Also, it is expected that work from home may ease or disrupt engagement at work.

**METHODOLOGY**

**Informant Details and Data Collection Procedure**

A total of 23 information-rich cases were approached, out of which seven were women. Data collection and analysis were done iteratively, and the interviewing process was stopped after the 23rd informant as no new thoughts emerged; in other words, information got saturated. The informants belonged to
Capgemini, Genpact, Deloitte, HCL, Build Supply, Nagarro Software Ltd, Accenture, CGI, Infosys, Tech Mahindra, and Wipro, to name a few. The mean age (number of years completed) of the informants was 33.13 ± 6.05. Informant-wise demographic details can be accessed from Table 1.

**Table 1. Details of the informants**

<table>
<thead>
<tr>
<th>#</th>
<th>Age (in years)</th>
<th>Gender</th>
<th>Designation</th>
<th>Country</th>
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<tr>
<td>1</td>
<td>30</td>
<td>Male</td>
<td>SAP FICO Consultant</td>
<td>India</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>Female</td>
<td>Process Developer</td>
<td>India</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>Female</td>
<td>Senior Consultant</td>
<td>India</td>
</tr>
<tr>
<td>4</td>
<td>32</td>
<td>Male</td>
<td>Senior Lead</td>
<td>India</td>
</tr>
<tr>
<td>5</td>
<td>30</td>
<td>Male</td>
<td>Senior Consultant</td>
<td>India</td>
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<tr>
<td>6</td>
<td>23</td>
<td>Female</td>
<td>Analyst</td>
<td>India</td>
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<tr>
<td>7</td>
<td>25</td>
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<td>Developer</td>
<td>India</td>
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<tr>
<td>8</td>
<td>28</td>
<td>Male</td>
<td>Associate Lead, QA</td>
<td>India</td>
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<tr>
<td>9</td>
<td>37</td>
<td>Male</td>
<td>Manager</td>
<td>India</td>
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<tr>
<td>10</td>
<td>35</td>
<td>Female</td>
<td>Team Leader</td>
<td>India</td>
</tr>
<tr>
<td>11</td>
<td>28</td>
<td>Male</td>
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<td>India</td>
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<tr>
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<td>B</td>
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<td>UK</td>
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<td>C</td>
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<td>UK</td>
</tr>
<tr>
<td>D</td>
<td>34</td>
<td>Male</td>
<td>Team Lead</td>
<td>UK</td>
</tr>
</tbody>
</table>

Each informant was invited for a semi-structured depth online interview. One of the authors trained by another author with the requisite experience and expertise in conducting online qualitative interviews interviewed the informant. The informants were assured of anonymity and confidentiality of their responses. To receive genuine responses, they were also told that their responses would be used solely for research. Most of them agreed to tape-record the interview. In such cases, the recording was listened to get the sense of informants’ answers repeatedly. On average, the interviews lasted
for around 30 minutes. In addition to the demographic details, ice-breaking questions, and closing questions, only the employees from IT companies were asked three core questions: (1) What are the challenges you are facing while working from home? (2) Why are you facing those challenges? and (3) How are you overcoming these challenges? Probing questions were asked to gain clarity or depth of their responses as and when required.

Interpretive phenomenological analysis (IPA) was used from setting the questions to interpreting results. For example, the questions were kept purposefully broad to make sense of the participants trying to make sense of their world as recommended by Smith and Shinebourne (2012). Scholars have also recommended semi-structured interviews to collect data by arguing that “this form of interviewing allows the researcher and participant to engage in a dialogue whereby initial questions are modified in the light of the participants’ responses and the investigator can probe interesting and important areas which arise” (Smith & Shinebourne, 2012; p. 57).

To ensure the robustness of the results, several measures were taken. For example, the analysis was done by two authors with the necessary expertise in IPA; the results were shown back to the informants to seek if this is what they meant as a part of the member-check exercise. For the transferability of the results, four informants from the United Kingdom were also interviewed.

RESULTS

Using the IPA technique, six job demands or challenges in e-engagement were obtained. One of the common factors across several informants was ‘social isolation,’ which, in the present context, stands for staying away from colleagues. This factor was reflected in the quotes 1: “No social interaction with teammates. Virtual interactions are impersonal and not going to replace actual physical interactions. It is difficult to make people understand my feelings online” (Respondent: 3; Age: 27 years; Female). “Because I have a family and even, I need some space and some time for my family and me” (Respondent: 2; Age: 28 years; Female).

One more factor which surfaced was ‘work-life imbalance.’ The informants said: “Balancing professional and personal life is sometimes challenging. Adjusting my own time is the biggest challenge. It varies from project to project, Manager to manager as I work in two different client projects” (Respondent: 1; Age: 30 years; Male). In the present context, work-life imbalance may be interpreted as a phenomenon wherein the personal tasks have not come in the way of professional ones or vice-versa.

‘Communication gap’ appeared to be another challenge for the informants. In their words, “Lack of team discussion and communication gap maybe because I am not able to set priorities.” (Respondent: 7; Age: 25 years; Male). “Coordination with the team especially when you have to coordinate between developers and testers” (Respondent: 8; Age: 28 years; Male). Here, the communication gap relates to message distortion in passing a message from one person to another, especially during coordination.

Interestingly, while a few informants opined that work from home saved their time, most of the other informants found that it had increased their work. A host of the following quotes represent this interpretation: “Too much work now compared to working from the office. It is draining my energy. Continuously sitting in front of a laptop is painful. (Respondent: 3; Age: 27 years; Female). I need some rest in-between. Even sometimes I do not get time to have my lunch in time” (Respondent: 2; Age: 28 years; Female). “Lunch hours are reduced as in-office we used to walk and talk with colleagues for few minutes at least. It affects my concentration negatively at work, you know” (Respondent: 3; Age: 27 years; Female). “I accept one thing, i.e., in office, we can stop our work as our shift time complete, but in WFH, we have to work exceeding our time limit. Sometimes it is 12 hrs or more than that” (Respondent: 2; Age: 28 years; Female). Thus, ‘work overload, in this context, may be defined as the assignment of more/time-consuming tasks beyond offline work hour norms.

Some of the informants sounded unhappy about official work encroaching on their personal space. As they said: “4 years kid bounded to one room for several hours is difficult. . He has to be
bounded to one room so that I can work in other room” (Respondent: 4; Age: 32 years; Male). For a few of them, working from home was not comfortable either. “Not getting suitable office-like environment. Lack of office furniture suitable to sit for long hours.” (Respondent: 5; Age: 30 years; Male). Therefore, ‘space constraints,’ forceful curation of official space out of the personal one, appeared to be another challenge.

Additionally, certain macro-environmental challenges such as power cuts, internet connectivity issues, and bad weather were also reported to hinder work. The following quotes represent these issues: “Sometimes bad weather or power cuts” (Respondent: 6; Age: 23 years; Female). “Power fluctuations in summer season in Delhi NCR is common” (Respondent: 4; Age: 32 years; Male).

To ensure transferability, responses from India were checked against responses from the United Kingdom (UK) to find anything unique. However, the responses from the UK did not reveal anything new. For example, one response was, “Actually, I am comfortable working from home, but the only issue I face sometimes is a network problem. This is okay because we also face similar issues in the office sometimes” (Respondent: C; Age: undisclosed). “In offices, we used to have two screens, but in-home, we are managing with one screen which at least saves few minutes a day, so all these happened in a short time since lockdown was called on” (Respondent: A; Age: 39 years; Male). While the former quote represents macro-environmental issues, the latter represents space constraints. Thus, it seems that the results of this study may also be transferable to the developed countries.

Preliminary Analysis

Though not required as per the suggested guidelines of IPA, a question-wise preliminary analysis was done to get a sense and feel of the responses. Three different word clouds were drawn for each of the three questions (refer to Figure 1-3). As shown in Figure 1, in response to the question: What are the challenges you face while working from home? Informants seem to be mainly worried about managing personal and professional time and space. As shown in Figure 2, in response to the question: Why are you facing those challenges? Informants seem to be holding network connectivity, infrastructure and set up space responsible. As shown in Figure 3, in response to the question: How are you overcoming these challenges? Informants seem to be mainly using avoidance strategies.

Towards a Model of e-engagement at Work

The data so collected provided rich insights to identify the job demands and resources. Additionally, the informants provided specific reasons that may help connect these links to fit into an erstwhile JD-R model to work engagement framework, as Bakker and Demerouti (2008) suggested. The following quotes represent the various resources that the employees of the IT companies put-in to meet the job demands identified in the earlier paragraphs:

“Trying to have frequent breaks in-between […]” (Respondent: 1; Age: 30 years; Male). “Taking frequent breaks to stretch […]” (Respondent: 5; Age: 30 years; Male). “[… ] maintain my fitness and attending virtual yoga/fitness sessions conducted by my company.” (Respondent: 5; Age: 30 years; Male) “Defining office hours […]” (Respondent: 14; Age: 36 years; Male). “Making the specific time table […]” (Respondent: 18; Age: 40 years; Male). “We drop off the call, rejoin again.” (Respondent: 16; Age: 39 years; Male). “Using personal data […]” (Respondent: 17; Age: 32 years; Female). “[… ] allocating separate space/ room for the work.” (Respondent: 18; Age: 40 years; Male). “Keep on changing the room, sometimes even within a day.” (Respondent: 23; Age: 48 years; Female)
A framework that weaves all these thoughts together conceptualizes certain measures to face a challenge as a precursor to electronic engagement at work. This relationship is moderated broadly by challenges.

Theorizing the quotes above received from informants by intertwining the JD-R model with the engagement theory, the following arguments can be made:

Based on the informants' rationale, it may be argued that social isolation, for at least few of them, is a cause of concern and it may interact with the measures to face challenges to ultimately interrupt the process of investing physical, emotional, and cognitive energies in an electronic mode at work. It also reaffirms that the need for socialization is a critical factor to help employees enhance their engagement.

Proposition 1(a-e): Social isolation will moderate the relationship between the measures to face challenges (a-e) and e-engagement at work such that in the presence of social isolation, the positive relationship between the measures to face challenges (a-e) and e-engagement at work will weaken.

Like social isolation, work-life of the employees is getting imbalanced due to the disappearing boundaries between work and life. It has created additional challenges in the way of employees taking measures to engage themselves better in their work. They find it difficult to manage their personal and professional work simultaneously.
Proposition 2(a-e): Work-life imbalance will moderate the relationship between the measures to face challenges (a-e) and e-engagement at work such that in the presence of work-life imbalance, the positive relationship between the measures to face challenges (a-e) and e-engagement at work will weaken.

As inferred from informants’ responses, due to technological faults and power cuts, electronic communication becomes difficult thereby leading to gaps. Such gaps do not allow the employees to take measures persistently and effectively as a gap needs additional time to resolve the issue. Thus, the positive effect that measures could have on e-engagement gets undermined in the presence of communication gaps.

Proposition 3(a-e): Communication gap will moderate the relationship between the measures to face challenges (a-e) and e-engagement at work such that in the presence of communication gap, the positive relationship between the measures to face challenges (a-e) and e-engagement at work will weaken.

This study results revealed that few companies take work from home as a leverage to extend the official time. The excuses for the companies include reduction in the commute time and plausibility
of finishing the home chores in short breaks, to name a few. The informants found it irritating that their companies took advantage of it and asked them to work even on holidays and in odd timings. Such burden of work exhausts the employees and they are not left with enough energy to invest into their work. So, they many a times, procrastinate taking measures to face challenges.

Proposition 4(a-e): Work overload will moderate the relationship between the measures to face challenges (a-e) and e-engagement at work such that in the presence of work overload, the positive relationship between the measures to face challenges (a-e) and e-engagement at work will weaken.

Findings of this study reveal that some employees with kids and elderly parents have developed a sense of guilt that their official work is encroaching into their family’s private space. They need to reserve an entire room for the official work. This sense of constant guilt over stresses them psychologically and takes away cognitive energy that they could have otherwise utilized into their work. Because of this reason, they find it hard to take sufficient measures and engage themselves.

Proposition 5(a-e): Space constraints will moderate the relationship between the measures to face challenges (a-e) and e-engagement at work such that in the presence of space constraints, the positive relationship between the measures to face challenges (a-e) and e-engagement at work will weaken.
Indeed, certain macro-environmental issues such as cyclones, recession, etc. distract employees from taking measures to face the challenges and which ultimately leads to lesser engagement levels at work.

Proposition 6(a-e): Macro environmental issues will moderate the relationship between the measures to face challenges (a-e) and e-engagement at work such that in the presence of macro-environmental issues, the positive relationship between the measures to face challenges (a-e) and e-engagement at work will weaken.

DISCUSSION

This study intertwined the job demand-resource model with engagement theory. The main contribution of this study is mainly in identifying the specifics of the job demands that are applicable in the Indian IT sector and what could be some of the resources that the employees themselves can put in place to meet those demands. Indeed, the demands here are limited to covering only the challenging side of the job.

While the JD-R model and work engagement framework works well in face-to-face, in-person communications, the emergent framework in the present study suggests a different set of resources
that have neither been classified under the job resources nor been classified under personal resources in the JD-R literature. The measures to face challenges, as pointed out by the informants, appear to be personal resources as they pertain to what an individual can do to overcome the challenges. Interestingly, the authors of the JD-R model pointed out that certain job resources such as autonomy, performance feedback, social support, supervisory coaching, and certain personal resources such as optimism, self-efficacy, resilience, and self-esteem left the scope of adding further resources. It invigorates a debate to re-look human resource management with a fresh lens in the electronic-human resource management context. Indeed, the thought behind it could well be the importance of context in which the study may be carried out and the difference that a context may make. In line with the arguments of Bakker and Demerouti (2008) that job resources can act as an intrinsic motivator to foster employee growth, the measures discussed above help employees engage themselves better even in the presence of challenges.

Because the present study was carried out in the context of electronic engagement of IT workers, the personal resources that they pointed out were much different from those in the non-electronic medium. Surprisingly, none of the informants spoke about any job resources, which indicates that either their job already had those or does not require such job resources, at least in the electronic medium. However, given that no explicit question regarding this observation was asked from the informants, such an interpretation could be a distant reality.

Theoretical Contributions
An important contribution of this study is to the engagement literature. The factors that affect engagement of employees in the electronic mode has some differences from those of the non-electronic ones. To electronically engage IT workers, it is clear that they need to leverage their resources, including taking frequent breaks, focusing on fitness activities, prioritizing their tasks, using alternate internet connections, and changing rooms frequently. Even in the challenging job demands environment, these resources can help the employees immerse themselves physically, emotionally, and cognitively into their work. While it may well be argued that measures to face challenges can affect the extent to which challenges influence e-engagement, responses from our study were silent about this aspect. For example, one of the informants said “I have alternate internet connection at home but last month cyclone in our state was really bad…all my arrangements couldn’t help”. It indicated that in the presence of macro-environmental issues, the positive impact of alternate internet connection on e-engagement is likely to reduce. Interestingly, in our study, the challenges and their measures were quite different from the ones in the traditional settings.

Managerial Implications
Apart from augmenting the existing theory of engagement, this study proposes specific implications for managers. The employees in the IT sector seem to be concerned, if not worried, about loneliness. The results indicate that they feel a need to socialize more. Thus, occasions such as birthdays should be celebrated virtually and fun meet should be organized to satisfy the need for socialization. Playing some online team games can really come handy on such occasions (Lashua et al., 2021). Gamification of mundane tasks may help employees engage themselves in their work. The managers are encouraged to promote the tried and tested measures pointed out by the informants of this study with the employees (Kankanhalli et al., 2012; Gupta et al., 2021; Behl et al., 2021; Jayawardena (in-press)).

Given the work-life imbalance issues and work over-load, as reported in this study, the companies are particularly encouraged to keep the deadlines flexible in order to accommodate day to day disturbances at home (Borpujari et al., 2020). It was also observed that those informants who had a baby or a kid found it much more challenging to engage themselves electronically. It was primarily due to a sense of guilt that their official work is encroaching into their personal space. For such employees, the companies may give option of using some temporary office space near their home. Next, because of the online-only contact, the employees have shown concern relating to communication
gaps. The main reason, according to our informants, was internet connectivity issues, power cuts, and device disturbance. For smooth working, the companies may like to provide best in-class electronic communication devices along with power banks to their employees.

Limitations and Directions for Future Research

It may not be sufficient enough to rely only on the measures to overcome the challenges as highlighted by this study. A few informants themselves were either not confident of tackling these challenges with the measures they suggested or were still trying to figure them out. A few quotes as follows, for example, suggest so: “Still not able to overcome the challenge” (Respondent: 15; Age: 32 years; Female) and “Actually still working on” (Respondent: 21; Age: 31 years; Male). While this study looks at the e-engagement remedies from the employees’ point of view, studies in the future may also like to cover the employers’ side. For example, what steps employers have taken to ease the difficulties faced by their employees, as mentioned in this study. Researchers may also be interested in exploring whether a particular challenge affects the physical, emotional, or and cognitive dimension(s) of engagement at work. In the future, researchers may also like to distinguish online, internet, and electronic engagement from each other. The emergent framework is not entirely based on the JD-R model. Resources represented in the emergent framework, for example, are individuals’ resources and not job resources. Thus, researchers in the future are encouraged to cover the job site of the e-engagement phenomenon and contribute to the emergent framework.
REFERENCES


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