

## **Mapping the strings of Digital Wellbeing of Employees: Literature Review**

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### **Abstract**

This paper examines a comprehensive picture of ‘impact of digitalization’ on the employee’s wellbeing as a result of technological advancement. A literature review, tracing emergence of ‘Digital Wellbeing’ as a multifaceted construct: state of Individuals, application-based intervention, practice and an outcome of disruptive technology. The analysis revealed, it caught the attention of HCI academicians, human science and technology European union’s thus gaining momentum due to implementation of Industry 4.0 and pervasive existence of technology at workplace. ‘Digital Well-being’ is the function of an employee's mental, emotional, physical, physiological health in the consumption of technology and digital services. The study offers a bibliometric review and theoretical framework in respect to Digital Wellbeing. It aims to identify existing research themes and propose future direction focusing on extension of existing theories to incorporate new realities of digitalized work.

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# **Mapping the strings of Digital Wellbeing of Employees: Literature Review**

## **SUMMARY**

This paper examines a comprehensive picture of ‘impact of digitalization’ on the employee’s wellbeing as a result of technological advancement. A literature review, tracing emergence of ‘Digital Wellbeing’ as a multifaceted construct: state of Individuals, application-based intervention, practice and an outcome of disruptive technology. The analysis revealed, it caught the attention of HCI academicians, human science and technology European union’s thus gaining momentum due to implementation of Industry 4.0 and pervasive existence of technology at workplace. ‘Digital Well-being’ is the function of an employee's mental, emotional, physical, physiological health in the consumption of technology and digital services. The study offers a bibliometric review and theoretical framework in respect to Digital Wellbeing. It aims to identify existing research themes and propose future direction focusing on extension of existing theories to incorporate new realities of digitalized work.

## **KEYWORDS**

Digital wellbeing of employees, wellness, employee, workplace, Physical ergonomics, future of work, cognitive ergonomics

## **1. INTRODUCTION**

“Digital burnout is the new phenomenon we must conquer!”- (The DWEL Project, 2022)

As a result, challenges surfaced due to the omnipresence of technology. There is a need to reimagine and redefine wellbeing; days have gone where occupational safety and health were underpinned by physical accidents. With the introduction of technology, employees face cognitive overload and dilemma to keep their identity, skills and knowledge up to date with rapidly changing technology, in turn evolution of organizational stress in the modern-day workforce.

Wellbeing surveys have reflected on a shift from retaining the employees to maintaining a healthy psychological state as the biggest challenges in workplaces. It is vital to assess the cause of mental stress at workplaces. The cost of poor wellbeing is critical; however, it opens an opportunity for employers to do something about it.

Even after having well-being linked HR policies, the effectiveness and results have posed a challenge for employers. A disconnect among employer’s intent, implementation and effectiveness of wellness intervention is a pressing roadblock for businesses.

As per the Gallup Employee Wellbeing Report poll 2023, close to 65% of employees feel they are struggling at the workplace . The underlying reason is a black box. One cause of low employee wellbeing is the digitalization of workplaces. The reason being unable to maintain a sustainable and healthy relationship with ICT at workplaces.

Industry 4.0 has accelerated technological advancement. “Digital Wellbeing” is an evolving facet of wellbeing. It can be considered as an application-based intervention, a state of individual, personality trait, practice as well as the outcome of disruptive technology that has sown its seeds in multidisciplinary literature. The analysis revealed the field has caught attention of HCI academicians, human sciences & technology, European Union and need of the hour thus gaining momentum due to implementation of ‘Industry 4.0’.

The emergence of the term Digital has its roots in the numeric system when way back when around in the late 1930s, the innovation of mathematicians and engineers resulted in a new kind of computing machine based on the algorithm of 0101. As an advancement to analogous device (energy based), these new machines operating on numbers gave rise to the term 'Digital' i.e. created using sequential digits like data, any machine making use of sequence of digits thus can be termed as 'Digital'. However, gradually, the advancement of technology has given rise to multiple contextual, persona, usage and mechanism-based meaning to it. It is a fundamental process of adopting and applying emerging, sophisticated (or digital) technologies at different levels (Kaplan and Haenlein, 2019). The effect of advancement in technology and digitization on the workers' life and wellbeing has been studied for decades, however 'Digital wellbeing' is relatively pristine.

### **WELLBEING:**

In modern positive psychology, the concepts of hedonic and eudaimonic wellness have gained remarkable importance, which in turn will result in varied sets of prescriptions, respectively (Ryan and Deci, 2000)

Wellness, Wellbeing, Well-being can be defined as an anchor-free existence of humans. These anchors can be in a variety of forms, positive-negative, physical disease–stress, thoughts, emotions, and existence below potential.

Interventions need to be designed as per targets specific aims. Unlike psychological and medical researchers who look at wellness as the absence of problems, a new perspective on wellness as an enhancement of potential and abilities (Ryan, Huta and Deci, 2008a) Interventions need to be designed as per targets specific aims. Unlike psychological and medical researchers who look at wellness as the absence of problems, a new perspective on wellness as an enhancement of potential and abilities (Ryan, Huta and Deci, 2008b).

### **DIGITAL WELL-BEING:**

Digital Wellbeing can be inferred as 'practice', 'state of physiological health, being 'psychologically' well, a digital application-based intervention wellness in human-technology interaction.

As per Ohio University wellness center, Digitally Well Person' is an individual who scrutinizes the influence of e-presence and consumption of technology over their comprehensive well-being by taking intentional measures in order to develop sustainable daily behavior ensuring the alignment with individual & social values, goals, community culture and environmental safety.

As mentioned by the EU, one's digital life is required to be secure, safe, convenient, simple and easy complemented by basic freedom', it underpins the theory of Individual's autonomy which technology has potential to threaten.

Further research on the Role of technology in challenging 'Identity' in the digital workplace can be explored.

Voxel has created a 'Digital Wellbeing' Scale which varies from 'Thriving' to 'Struggling'. 'Digital wellbeing' can be termed as an intentional continuous process of informed decision

making by stakeholders to encourage one's well-being in the digital era (Sylwia Korsak, 2023) Balancing the multifaceted impact of digital engagements.

UNESCO has considered 'Digital Wellbeing' as a means and an intermediate input to encourage human development, flourishing and wellbeing. It encompasses 'Digital literacy', Digital Skills' and more.

In 2016, Google introduced a feature in Android which gave rise to 'Digital Wellbeing'. Google has a technology problem with the technological features focused view of 'Digital Wellbeing'. It refers to the tools which can help individuals and their family to encourage & ensure their personal sense of Digital wellbeing in order to keep life at the center and not technology. Tools & features on digital devices that can create nudges to inculcate healthy digital engagement habits.

Joint Information Systems Committee (JISC), a UK based NGO agency defines 'Digital Wellbeing' as a consequential influence of technologies and Digital services on humans mental, physical and emotional health. It has further been divided into an individual level which encompasses individual's personal, contextual learning whereas organizational level or societal level considers the responsibility as a provider of digital service ensuring supported, equitable and well managed digital content. It further includes the responsibility of organization or society to empower and build the capabilities of all users engaging in digital space that can encourage users' wellbeing.

Table 1: Definition of Digital Wellbeing

| DEFINITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | AUTHOR                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Contextual to I-O psychology "Digital Well-being" refers to the mindful state of employees for selective ICT use that holds the potentials by mitigating the negative effects of digital technologies (distraction & information overload) thereby encouraging job performance and wellbeing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (Dadischeck, 2021)                  |
| Digital Wellbeing can be a guiding force steering away from frivolous consumption, isolation, alienation and self-harm. The overdose of technology can make individuals distracted from actual work and social exchange.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (Valasek, 2022)                     |
| The impact of digital technologies on what it means to live a life that is good for a human being in an information society                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (Burr and Floridi, 2020)            |
| DWB as a multi-level phenomenon that occurs out of new, unique challenges related to navigating the ever connected nature of digitized workplaces: (1) the blurring of personal–professional domains; (2) mental fatigue from information overload and incessant digital communication; (3) increased pressure of digital multitasking; and (4) exacerbated societal challenges of equity and inclusion, given the digital divide between different socioeconomic groups                                                                                                                                                                                                                                                                                                | (Ren, Chowdhury and Budhwar, 2025a) |
| <p>A manager's digital wellbeing refers to a set of knowledge, skills, attitude and actions for optimization of somatic, mental and social health of individuals driven by responsible and sustainable use of ICT</p> <p>Employer's dimensions encompass the encouragement and promotion of digital wellbeing through navigating an always-on culture, supporting employee satisfaction, efficiency and thereby organizational performance.</p> <p>Digital Well Being refers to the balanced and healthy state of employees in use of ICT within workplaces. It includes dimensions like technostress management, work-life conflict and intentional conscious usage of technology to encourage productivity without sacrificing personal wellbeing of individuals.</p> | (Mikołajczyk, 2024)                 |

With the pursuit of Industry 4.0, flourishing to employees as diverse technologies unfold, there is a need to interrogate the means to encourage flourishing with the technology, through creation of a symbiotic human machine eco-system supportive of invigorated human capacities (Oberländer, Beinicke and Bipp, 2020) 'Technology addiction' is intertwined in the modern workplace having pervasive technologies. In simple terms, a form of non-substance enslavement among individuals' pathological psychological dependency on the usage of technology (Turel, Serenko and Bontis, 2011).

### **DIGITAL BALANCE:**

Digital Balance Framework trademarked by 'Digital Wellness Institute', co-founded by Harvard graduate Amy Blank, is a comprehensive tool to assess the balance, an index and metric for modern day digital workplaces scientifically designed on symptomatic indices such as employee burnout, employee turnover, screen time, mental health of employees.

Source of Digital Friction at workplace:

- Too Many Applications: In the name of integration of analytics, employees are exposed to a diverse and huge number of applications combined with multiple digital information and activity hosts.
- Digital Noise Pollution: The notification and signals come with a sound, vibration and a wakeup call to be addressed. The relentless noise distracts the employees from being focused, an echo effect is created in the head in turn bringing behavioral and mental alterations.
- Flood of Information: The huge volume of information, data, e-activity and human computer transactions can put a burden on employees.

### **COMPETENCE AND DESKILLING: A Capability approach**

'Digital Competency' from the lens of KSAO concept can be referred to as a bundle of KSA and other attributes of Individuals enabling them to accomplish their job linked task in respect to Digital media at work (Oberländer, Beinicke and Bipp, 2020). Digital Competency can be considered as a multi-faceted construct in respect to applied skills and knowledge for creation of contextual value in alliance with technology.

The trace of literature encompasses majorly a) un-profitable reduction in the valuation of worker with remarkably trained knowledge and skills; Danger of moral down skilling; Erosion/abasement of 'Humanness' through reduction in demand for SSA (Skill, strength and attention)

Business organizations are curiously examining for differentiating digital capabilities that applicants or employees possess to navigate in an uncertain digital environment. From creating presentations, efficiently working with excel to establishing effective digital communications across stakeholders for effective business operation and higher performance are of utmost importance to organizations. Enabling their talent to use technology to enhance creativity, innovation, problem solving, communication, increase participation, learning, collaborate and assist others at digital workspaces. It is suggested to retrain and upskill the existing employees with future skills to have a healthy and productive interaction with technologies.

Identify skills requirement > Look for training interventions > Feedback (Evolve/ Continuous Learning)

## **TECHNOSTRESS:**

In 1984, Craig Brod introduced the term ‘Technostress’ as a human cost to the computer revolution. He defines it as a ‘disease consequential to the inability to adapt to advanced computer technologies. However, in the modern era, due to covid-19, it has resurfaced itself.

Broadly the given below can be sources of technostress include ‘Techno-overload’ i.e. possibility of IT to pressurize to work quickly ; ‘techno-invasion’ consider personal-family work conflict into picture blurring the boundaries of personal and professional space; techno-complexity , due to complicated competency need risen, employee may feel demotivated ; technology-insecurity takes influence of job security due to advancement in technology , the fear of replacement by machines; techno-uncertainty include the dispositions of individuals towards high rate of technology and inability to cope up (Tarafdar *et al.*, 2007).

In times where digital devices like smartphones, laptops and tablets offer boundaryless connectivity irrespective of time or geographical location, traversing to ensure higher efficiency with work life balance, maintaining stress levels is a complex function of one’s ability to prioritize and disconnect from digital devices when required. Literature has traces of its contribution in recovery from Job-stress (Sonnetag *et al.*, 2014) and having healthy relationships with machines.

Due to very scarce literature available assessing a comprehensive influence of Digitalization on the wellbeing of employees at the workplace is needed. Therefore, this study demonstrates a bibliometric analysis and systematic literature review of ‘Digital Wellbeing’ of employees at the workplace and its multifaceted nature.

Further, it explores the evolving nature of wellbeing as a result of digitalization of workplaces for employees with given objectives below by encompassing probing research questions defining the scope of this study:

1. To ascertain the current state of research on the evolving meaning wellbeing due to digitalization i.e. Digital Wellbeing’ of employees, recent patterns of publication, journals, authors, highly influential nations, institutions and themes. (RQ1)
2. To provide business practitioners and academicians, a deeper understanding of impactful highly cited theories, uncover future direction, dominant themes and emerging trends in the Digital wellbeing literature as a multidimensional construct (RQ2)
3. To propose a comparative analysis of existing and proposed theory for a deeper understanding digitized work environment, and better theoretical explanation to the evolving construct of ‘Digital Wellbeing’ (RQ3)

The bibliometric and systematic literature from theoretical lens has been presented in the result and analysis section. A brief introduction of related terms from wellbeing to fatigue and Employee digital disconnection to set the tone for answering the defined research questions.

Table 2: Emerging multidisciplinary themes in 'Digital Wellbeing' literature

| Authors                    | Objectives/<br>Methodology                                                                                                                                                                                                                                                                                                                                                                         | Findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Recommendation &<br>Future research                                                                                                                                                                                                                                                   |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile<br>Connectivity     | Causes of Zoom fatigue in videoconferencing.<br>Individual and contextual factors influencing Zoom fatigue.<br>Gender differences in Zoom fatigue experiences.<br>Personality's impact on nonverbal communication in videoconferencing.<br><br>Quantitative, online convenience sample: 9787 participants<br>To identify causes of Zoom fatigue<br>Theory on Computer Mediated communication (CMC) | Zoom fatigue challenges digital well-being in video-conferencing contexts.<br>- Nonverbal overload contributes to feelings of Zoom fatigue.<br>- Key factors include mirror anxiety and hyper-gaze effects.<br>Organizations should implement strategies to protect mental health - Zoom fatigue correlates with video-conferencing frequency and duration.<br>- Longer breaks between meetings reduce Zoom fatigue.<br>- Women experience greater Zoom fatigue than men.<br>Self-reported measures may overestimate actual Zoom fatigue levels | Future research should utilize different methods, such as interviews and behavioral studies, to evaluate Zoom fatigue and explore how diverse gender identities navigate the psychological experience of videoconferencing                                                            |
| <b>DIGITAL WELL-BEING:</b> |                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                       |
| Conceptual<br>Paper        | The focus of the research appears to be on a conceptual and theoretical exploration of grand challenges and digital wellbeing rather than detailing a specific research design.                                                                                                                                                                                                                    | - The grand challenge concept should be revitalized, not retired.<br>- The paper emphasizes the need for meaningful business research.                                                                                                                                                                                                                                                                                                                                                                                                          | - A systematic investigation of DWB is urgently needed.<br>- Digital wellbeing (DWB) is essential in today's digitalization era.<br>- Regulatory standards can improve DWB and user-centric design.<br>- DWB requires rigorous measurement and differentiation from other constructs. |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                              |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>- Inclusive policies foster a supportive workplace environment for all.</li> <li>- Organizations should prioritize digital tools that enhance employee wellbeing.</li> </ul>                                                                          |
| <b>TECHNO-STRESS:</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                              |
|                        | <p>Investigate the association between workplace tele pressure and various wellbeing and health outcomes, including psychosomatic complaints, sleep quality, mood, and biological alterations. . Explore mediation role of work-related workload and cognition</p> <p>Online entry questionnaire, a laboratory visit, and the ambulatory assessment phase: To create theory led intervention</p> <p>Effort-Recovery Model</p> | <p>Workplace tele pressure negatively impacts wellbeing and health outcomes.</p> <p>Increased psychosomatic complaints are linked to workplace tele pressure. Poor sleep quality is associated with workplace tele pressure. Connection to work mediates the effects of workplace tele pressure. Use of ambulatory assessment</p> | <p>Work-related demands</p> <p>Evaluation of effective Interventions at organizational and personal level</p> <p>Population changes as this study included music students, further CA's, Consulting firms which find it difficult to switch off their professional life can be explored.</p> |
| <b>DIS-CONNECTION:</b> |                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                              |
|                        | <p>Develop and validate the Employee Digital Disconnection Scale (EDDS): Measure employees' intentional behaviors associated with limiting the use of ICTs</p> <p>Quantify digital disconnection behaviors in employees, explore</p>                                                                                                                                                                                          | <p>EDDS measures employees' digital disconnection behaviors. (Item Pool)</p> <p>Assesses disconnection: work-related ICTs and private ICTs</p> <p>Digital disconnection relates to stress coping and segmentation preferences.</p>                                                                                                | <p>A diverse sample is suggested and investigate the interplay of disconnection actions whether it can mitigate negative outcomes associated with employee connectivity, such as technology overload and burnout levels</p>                                                                  |

|  |                                                                                                                                                                                                                                                                      |                                                                                |  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--|
|  | <p>associations with employee well-being and performance.</p> <p>Mixed-methods approach, incorporating both qualitative and quantitative elements qualitative interviews with 39 Flemish employees to identify dimensions of the concept and create an item pool</p> | <p>Subscales correlate with psychological detachment and work performance.</p> |  |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--|

The above table shows a summary of a few prominent empirical and theoretical articles from across the disciplines focused on employee, business and organizational level outcomes.

## 2. METHODOLOGY

Systematic reviews have gained popularity in management sciences due to their scientific nature with characteristics of repeatability.

### 2.1 DATA COLLECTION:

In the given study, we retrieved bibliometric information from the Scopus and Web of Sciences Databases using the keywords “Digital Wellbeing”, “Digital Well being”, “Digital Wellness” OR “Digital Well-being” in their titles, abstract, and authors keywords. It considered only articles and review papers published in journals. Scopus covers 87 million plus documents, and 1.8 billion cited references from 1978 till the current year. As per the official content report of Scopus, it contains over 28,000 titles with social science contributions in total close to 40%, i.e., approx. 12,050 titles. Scopus, with its large coverage, subsumes most of the published work available on the Web of Science as well. Therefore, providing a comprehensive overview of the world’s research output across disciplines.

### 2.2 DESIGN/METHODOLOGY/APPROACH:

A combined data retrieved from Scopus and Web of Sciences databases analyzed using Biblioshiny and Vos viewer to trace the literature trends of ‘Digital Wellbeing’. Trails of key metrics including number of publications, citation, h-index, and authorship were traced to identify the evolving facet of well-being i.e. ‘Digital Wellbeing’.

A sciento-metric analysis subsequently PRISMA on combined data from 2 databases has been utilized to identify, screen, scan and analyze the emerging literature in the field of management to measure the true impact of technological revolution at the workplace. Further, solution centric lenses to enhance the digital wellness of employees in digitization of workspace are mapped. Subsequently, systematic literature was performed to get a deeper understanding of

this evolution in the business and management domain and traction of employee wellbeing in digitization.

The bibliometric information of 185 articles was retried by combining Scopus and a web of science database using biblio-shiny. Search results were refined using the subject, language, publishing stage, type of the document (articles and review) and broader subject categories specific to business and management. The given search query was utilized to focus on tracing the conceptual definition and meaning of Digital Well-being in digitalized work. The key focus is on the “what is digital well-being” angle in the literature.

Among the available tools biblio-shiny is used due to its methodological alignment with aimed research objectives unlike Gephi or Citespace, which specializes in detection of citation burst and historiographic mapping. Biblio-shiny is efficient and optimized for tracing thematic evolution, mapping co-authorship and co-citation with ease and in-depth interpretability (van Eck and Waltman, 2010; Aria and Cuccurullo, 2017). These tools have an integrated platform making it relevant and suitable for combing the database, mapping the conceptual landscape of Digital wellbeing of employees and for identification of future directions.

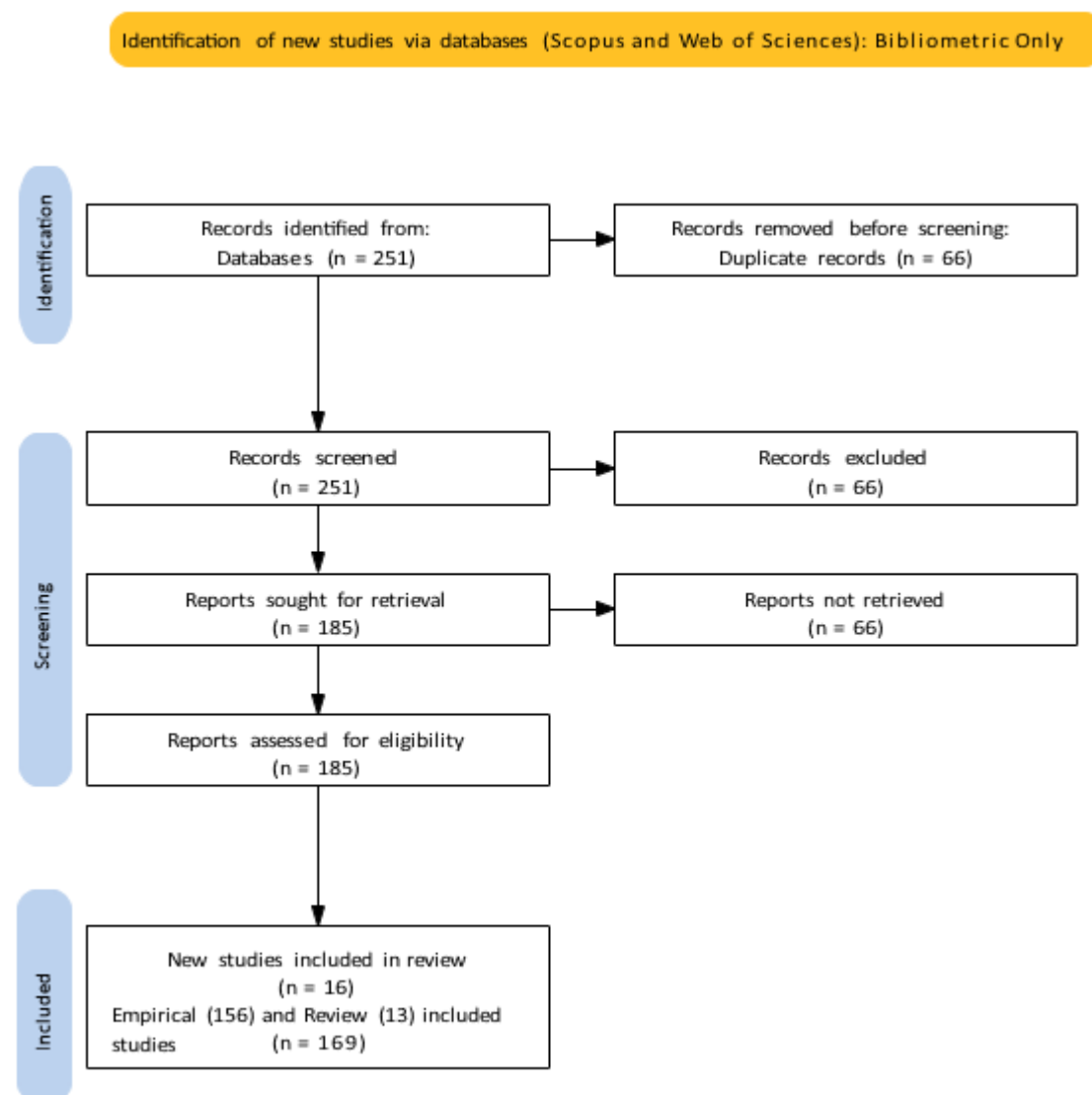


Figure 1: Identification of Studies for Bibliometric Analysis

### **2.3 PERFORMANCE ANALYSIS:**

It examines the contribution of various included research constituents across disciplines in the current field (Ramos-Rodríguez and Ruiz-Navarro, 2004; Cobo *et al.*, 2011). It contains a descriptive analysis of retrieved data (Donthu *et al.*, 2021). Performance analysis is a standard practice employed in literature review articles to present the performance of different research contributors (i.e., authors, institutions, countries, and journals) over a period (Donthu *et al.*, 2021)

In order to capture the thematic evolution till the present, the time -period considered was from 2016 to 2024. 131 Journal sources were identified from 185 research articles and review publications available on Scopus and the Web of Sciences. The annual growth rate is 66.83%, which implies a potential to work more and publish more articles. Out of the total, 172 were research articles, whereas 16 were review articles, which indicates a gap and a future direction more robust literature review articles to map the relationship among existing work and develop the theoretical bases for better understanding of ‘Digital Wellbeing’.

## **3. RESULTS AND DISCUSSION:**

### **RESULT ANALYSIS:**

The results section includes the trend of publication in ‘Digital Wellbeing’ of employees, sources, highly productive authors, countries, collaboration mapping and strong impact articles, thematic transition, Dimension map, topic trend from authors keywords over the years, co-citations and content analysis using in- depth study to answer the outlined research questions 1, 2, and 3.

#### **3.1 Publication Trend of ‘Digital Wellbeing’ of employees:**

The annual publication visual shows an increasing trend in publication from 2016-2024 indicating a growing interest in ‘Digital Wellbeing’. Though, wellbeing’ has a history of long debatable interpretation for multiple stakeholders, digital well-being has surfaced post covid as a result of challenges and impact of Digitalization on humans. ‘Digital Wellbeing’ is not an innovative buzzword but rather another facet of wellbeing. Studies, considering technostress, screen time, mobile connectivity have been widely conducted. However, now

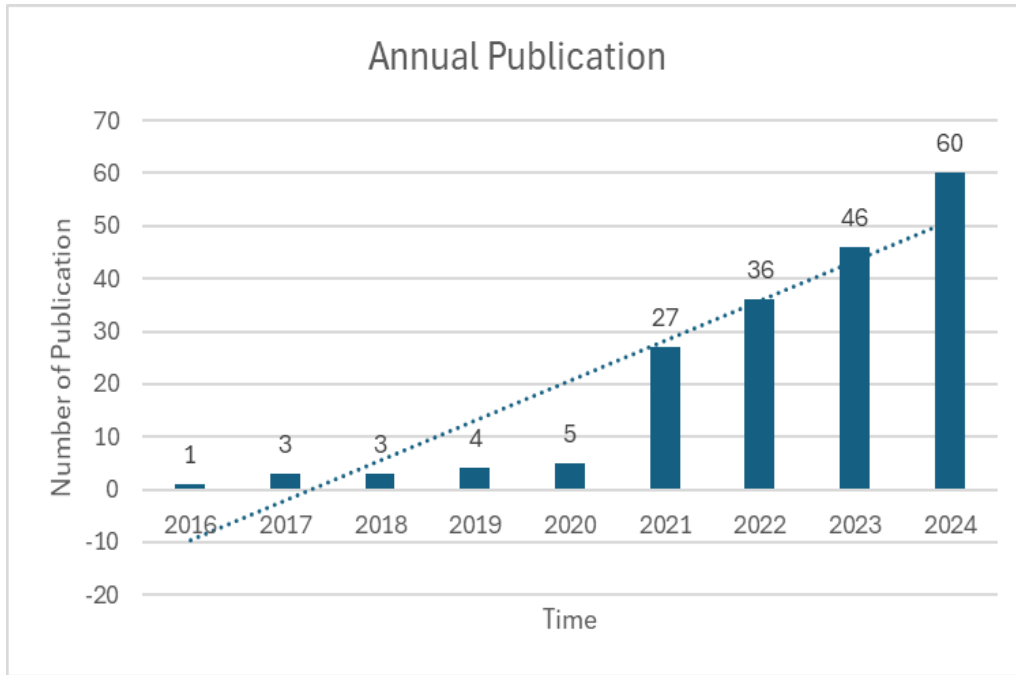


Figure 2: Annual Publication Digital Well-being

academics are trying to operationalize digital disconnection to measure the impact of abundance of technology. It is crucial to capture the evolving nature of wellbeing at workplaces to have the right set of laws regulating workplace safety and health and introduce effective digital disconnection interventions for employees. 2016 marks the first publication available on Scopus and web of sciences, followed by growing interest of academicians till 2024 to understand the impact of Digitalization on the users. Interestingly, the number of publications has experienced a multi-fold growth. However, due to lack of commonly agreed understanding, a varied lens can be traced in the literature. Therefore, there is a need to establish a comprehensive definition of ‘Digital Wellbeing’ of Employees to bridge the gap between theory and practice.

In order to capture the true and evolving multidisciplinary nature of the domain, it is suggestive to have more cross-disciplinary research in future.

### 3.2 Publication Sources and Details:

The 185 papers analyzed were published in 131 different journals. Table 4 presents the list of highly productive journals in the field of ‘Digital Wellbeing’. To ensure the authorized origin and quality, only published articles and review documents in the journals have been captured. Book chapters, unpublished work, or conference papers were excluded at the time of search. Tables

Table 3: Leading Journals producing Scientific Work on “Digital Well-being”

| JOURNAL NAME                                         | Publisher                 | Total<br>Produ<br>ction | AB<br>DC<br>Ran | Imp<br>act<br>Fact | h_in<br>dex | g_ind<br>ex | m_i<br>nde<br>x |
|------------------------------------------------------|---------------------------|-------------------------|-----------------|--------------------|-------------|-------------|-----------------|
| MOBILE MEDIA & COMMUNICATION                         | SAGE Publications         | 7                       | A               | 4.9                | 6           | 7           | 2               |
| BEHAVIOUR INFORMATION & TECHNOLOGY                   | Taylor & Francis          | 5                       | A               | 3.7                |             |             |                 |
| PROCEEDINGS OF THE ACM ON HUMAN-COMPUTER INTERACTION | ACM                       | 5                       | A*              | 4.06               | 4           | 5           | 1               |
| COMPUTERS IN HUMAN BEHAVIOR                          | Elsevier                  | 4                       | A               | 9.9                | 3           | 4           | 0.8             |
| FRONTIERS IN PSYCHOLOGY                              | Frontiers                 | 4                       | A               | 2.6                | 2           | 4           | 0.3             |
| INTERNATIONAL JOURNAL OF HUMAN-COMPUTER STUDIES      | Elsevier                  | 4                       | B               | 5.3                | 3           | 4           | 1               |
| NEW MEDIA & SOCIETY                                  | SAGE                      | 4                       | C               | 5                  | 2           | 4           | 2               |
| PLOS ONE                                             | Public Library of Science | 4                       | B               | 2.9                | 3           | 4           | 1.5             |
| CYBER PSYCHOLOGY BEHAVIOR AND SOCIAL NETWORKING      | Mary Ann Liebert, Inc.    | 3                       | B               | 4.2                | 1           | 1           | 1               |
| PHILOSOPHY AND TECHNOLOGY                            | Elsevier                  | 3                       | A               | 2.1                | 3           | 3           | 0.8             |
| SUSTAINABILITY (SWITZERLAND)                         | MDPI                      | 3                       | B               | 3.3                | 1           | 3           | 0.3             |
| BMC PSYCHOLOGY                                       | Springer                  | 2                       | B               | NA                 | 1           | 1           | 0.5             |
| CANADIAN JOURNAL OF LEARNING AND TECHNOLOGY          | CNIE                      | 2                       | A               | NA                 | 1           | 1           | 0.3             |
| COMMUNICATION THEORY                                 | Wiley-                    | 2                       | A               | 4.7                | 2           | 2           | 0.5             |
| COMPUTERS IN HUMAN BEHAVIOR REPORTS                  | Elsevier                  | 2                       | A               | 4.9                | 1           | 2           | 0.5             |

### 3.3 Productive Authors, Institutions and Countries:

The darker shades of blue reflect more contributions in published works by the country. However, the lighter shades show an opportunity for developing countries. India, with a medium-toned blue hue, is an opportunity to expand the understanding of ‘Digital Wellbeing’, to capture the adoption of technology, challenges and coevolution of people with advancement in technology. Indian Knowledge written in Sanskrit offers historical insights for bringing back the purpose and sustainable growth of society and can provide a direction for intervention for long term behavioral detox from pervasive technology. Making technological advancement more humane is a challenge where countries should come together for sustainable advancement of technology at workplaces.

## Country Scientific Production

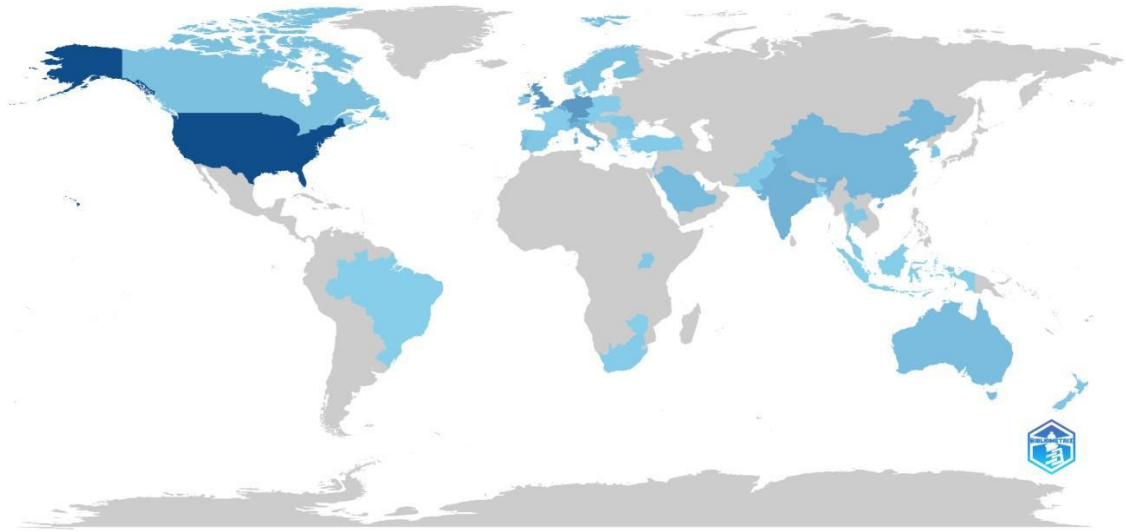


Figure 3: A map showing a country's specific volume of academic production - generated using Biblio-shiny

The US has contributed to the maximum number of documents i.e. 83, followed by the UK with 35 documents and India ranking 8th with 18 articles. Since DWB' is an emerging facet of wellbeing, developing countries are yet to assess its influence on employees at the workplace.

### 3.4 Influential Authors:

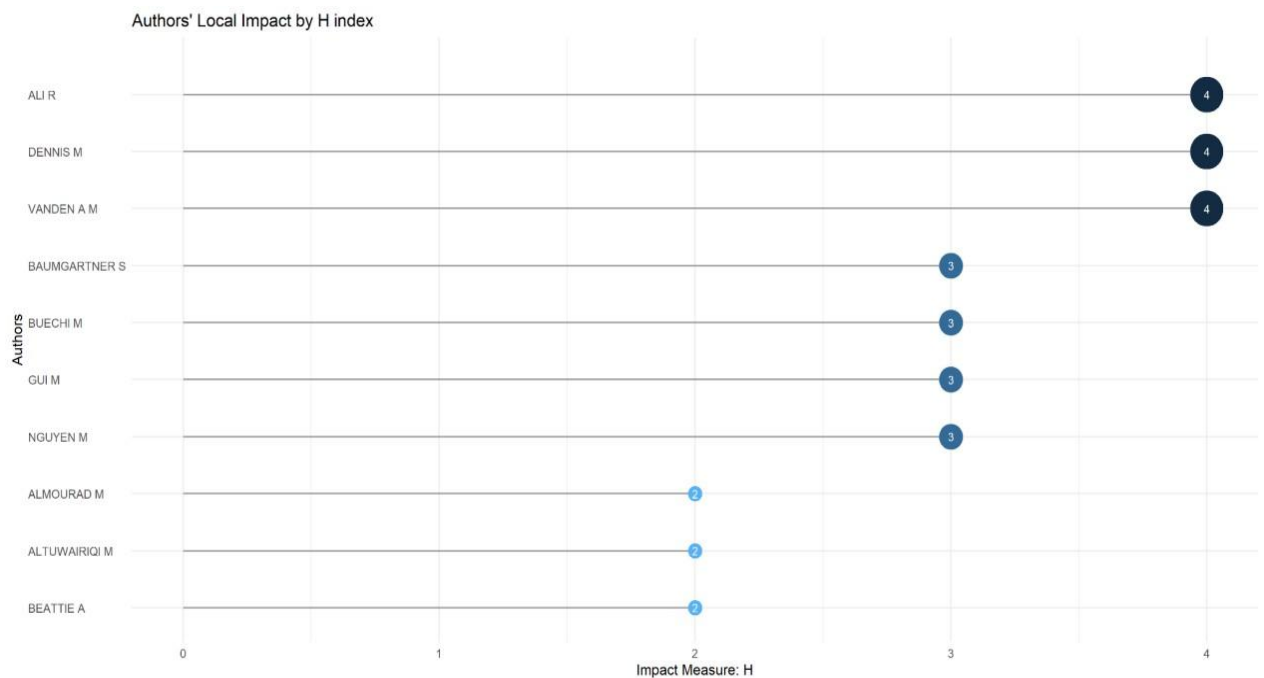


Figure 4: Influential Authors having highest H Index

Raian Ali has the highest H index of 4, with Matthew J. Dennis, and Mariek M P Vanden Abeele with 4 H index followed by Moritz Büchi, Nguyen and more with 3 H index respectively. They all have contributed in scientific literature to build a consensus on 'Digital Wellbeing' as a multidimensional facet of Wellbeing. Vanden Abeele, a female, has a single authored article and is among one of the highly cited academicians in the field of Digital Wellbeing, her area is 'Digital Culture' with focus on communication.

Furthermore, the pioneering work by (Vanden Abeele *et al.*, 2024), Raian Ali and Dennis reflects on the conceptual establishment and evolution of Digital Wellbeing as multifaceted yet converging field. Vandel Abeel work is specifical foundation specifically in media and communication studies, focused on digital media usage and its influence of psychosocial health of adults. Ali further have considered the CDR view and brought an ethical system to encourage the challenge of diluted autonomy whereas Dennis has uncovered self-tracking and moral agency to the literature.

Despite separate discipline, they all converge to bring wellbeing in techno driven world, trying to bring back the focus on 'human centricty'. All the work centered to restructure the environment or inner self to support human wellbeing than to erode. The field needs comprehensive literature which can bring together the different thoughts of school, findings and a true picture effect of digitalization on employee wellbeing.

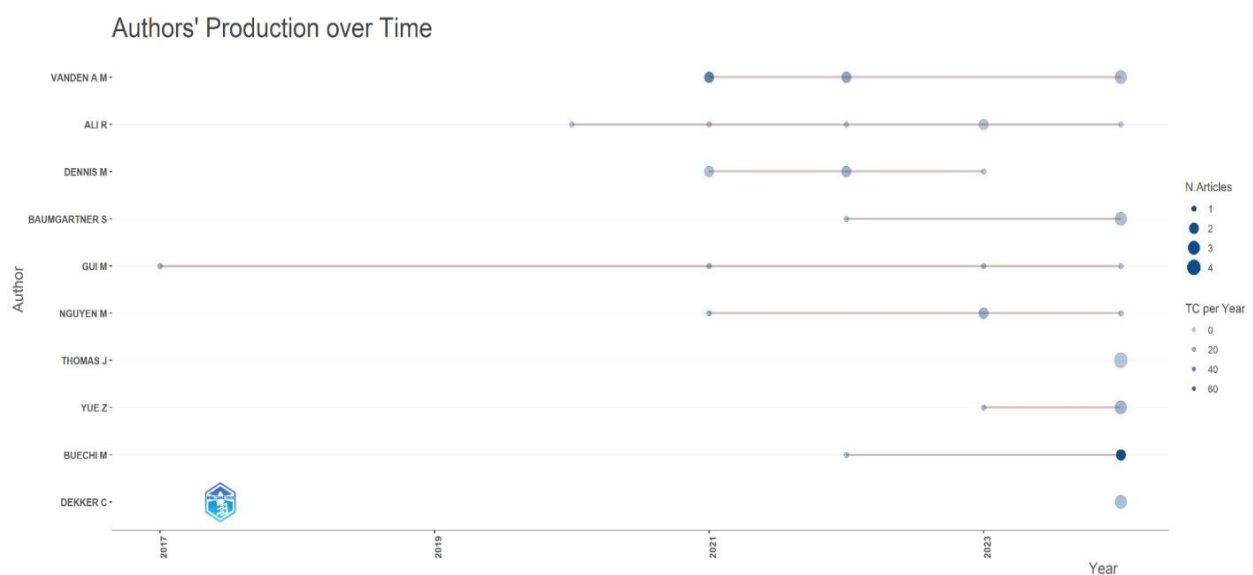


Figure 5: Author's Production over Time

However, gradually the world is capturing the flip side of technology which cannot be limited to constant communication and its ill effects. There is a need to bring ambulatory assessment to truly capture the impact of usage of technology on the wellbeing of employees. Apart from psychology there is a need to collaborate with Medicinal and clinical sciences to bring rigor and robustness in the assessment of causality of detox and disconnection practices.

### 3.5 High Cited Publication:

Table 4: Top 10 Highly Cited Articles

| Author                                    | Year | Title                                                                                                                     | Total Citations |
|-------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------|-----------------|
| Apurva kumar Pandya ;Pragya Lodha         | 2021 | Social Connectedness, Excessive Screen Time During COVID-19 and Mental Health: A Review of Current Evidence               | 214             |
| Mariek M P Vanden Abeele                  | 2021 | Digital Wellbeing as a Dynamic Construct                                                                                  | 148             |
| Christopher Burr; Mariarosaria Taddeo; Lu | 2020 | The Ethics of Digital Well-Being: A Thematic Review                                                                       | 102             |
| Marco Gui Fasoli Roberto                  | 2017 | "Digital Well-Being". Developing a New Theoretical Tool For Media Literacy Research                                       | 92              |
| Uglješa Stankov & Ulrike Gretzel          | 2021 | Digital well-being in the tourism domain: mapping new roles and responsibilities                                          | 52              |
| Marco Gui Moritz Büchi                    | 2021 | From Use to Overuse: Digital Inequality in the Age of Communication Abundance                                             | 51              |
| Christina Floros,Wenjie Cai               | 2021 | Imagine being off-the-grid: millennials' perceptions of digital-free travel                                               | 49              |
| Moritz Büchi                              | 2024 | Digital well-being theory and research                                                                                    | 48              |
| Minh Hao Nguyen                           | 2021 | Managing Social Media Use in an "Always-On" Society: Exploring Digital Wellbeing Strategies That People Use to Disconnect | 46              |
| Adrian Meier                              | 2022 | Studying problems, not problematic usage: Do mobile checking habits increase procrastination and decrease well-being?     | 40              |

Citations are a parameter of the reputation of an author's research work and impact on the academician's community. The higher the number of citations, the more any article is cited, the wider the reach and influence symbolizing the impact of work. With 214 global total citations "Social Connectedness, Excessive Screen Time During COVID-19 and Mental Health: A Review of Current Evidence" by Apurv & Pragya ranks top followed by 'Digital Wellbeing as a Dynamic Construct' which is a single authored article by Mariek M P Vanden Abeele who is an Associate Professor in Digital Culture in Belgium.

The mentioned works identify the turning point rather than comprehension of wellbeing literature. Apurv and Pragya were able to operationalities the digital interaction at the point of inflexion during covid as a double-edged sword while surfacing the mental health concerns pinpointing the need for healthy balanced digital interactions and connectivity. In addition, Vanden Abeele's model presents a dynamic interplay of individual, situational and technological factors proposing a curvilinear relationship of wellbeing, technological induced consequences and outcomes. In a nutshell, it directs the future research towards exploring the socio-technical dynamics from a multi-stakeholder perspective. Since existing evidence is largely dominated by covid time work, it surfaces the need to explore the new normal through experimental, longitudinal studies keeping the cultural and normative authenticity.

### 3.6 Thematic Map:

Motor themes in the top right quadrant include well-developed motor themes in relation to 'Digital Wellbeing' that include study of interconnection between work-life balance of employees and productivity, psychosocial impact of technology usage at workplace, and hyper connectivity in relation to disconnection. Digital Inequality as differential distribution to digital connectivity and resources with the focus on the need for training for the workforce to overcome technostress.

Bottom right corner reveals the need for Digital Wellness interventions, screen time as an indicator of technology usage, scoping review indicating evolving nature of digital wellbeing as a facet of deep-rooted wellbeing of employees.

Niche themes include internet usage and temporal disconnection with the role of HR policies on supporting the detachment from work for effective performance, health and safety of employees in digitized workplaces.

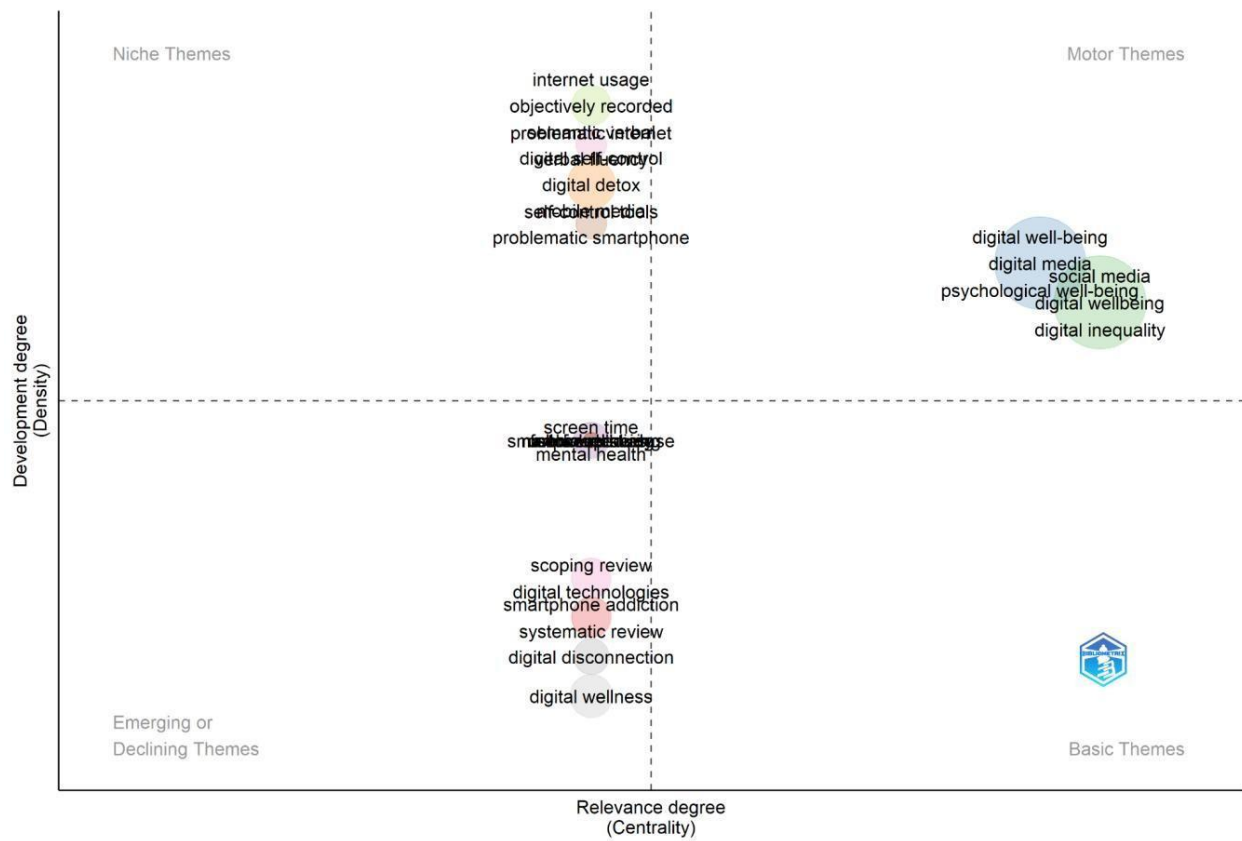


Figure 6: A graph showing evolving themes

The visual graph presents an overarching view of emerging theme of ‘Digital Wellbeing’ literature. Due to the phenomenon being underexplored and to avoid any skewed inferences only close synonyms and similar words have been utilized in search string. Future research is suggested to use different search strategies to retrieve academic work as a challenge, solution or impact to map the pioneers in field and have in-depth comprehension of literature from a single philosophy or school of thought in tracing the evolution of wellbeing in digitalized environment.

### 3.7 MDM:

A visual representation to map the related topics with ‘Digital wellbeing’ is created using biblio-shiny. It revealed 2 broad dimensions: Dimension 1- revolving around digital well-being, overuse of technology, and persuasive technology, an active usage based related concepts emerged due to the pervasiveness of digital devices. However, Dimension 2, reflects the solution centric lens to state of technology usage, technological addiction intervention and disconnection for balancing the impact on the users.

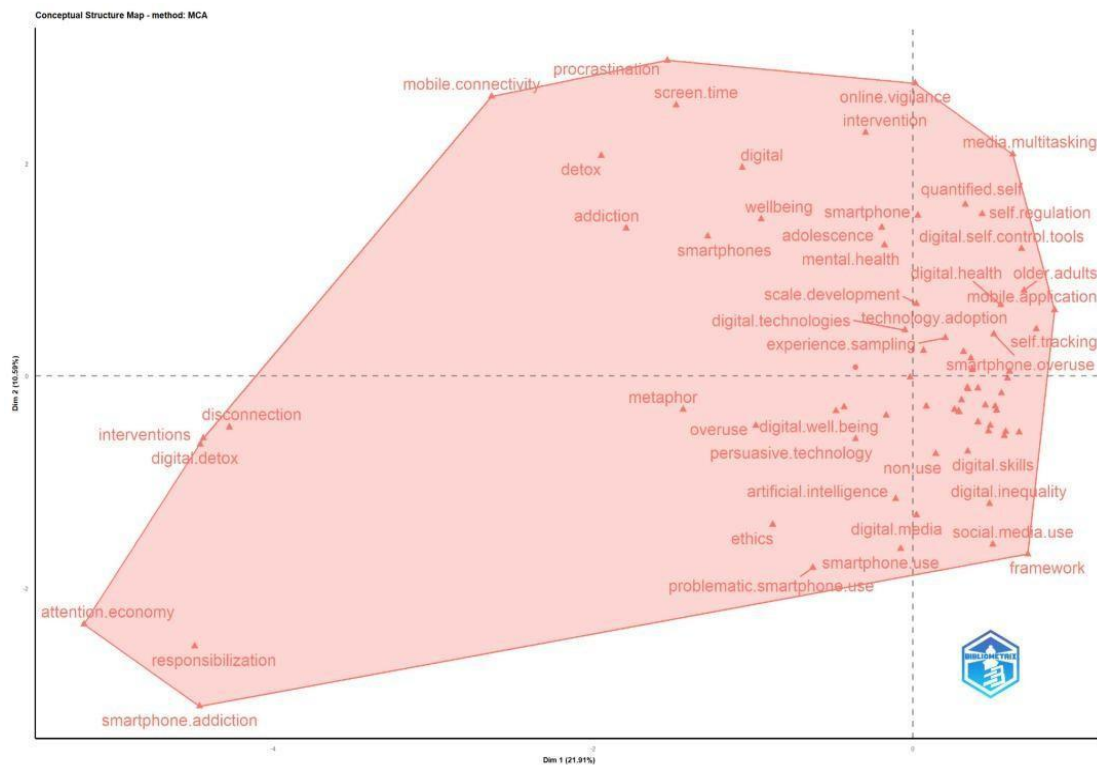


Figure 7: An MDM Graph: Digital Well-being

The map has clustered keywords into overlapping specific research domains, the top-right quadrant revealed ‘Digital Wellbeing’ as a self-control application in the smartphones, self-regulation, digital health and administration of overuse of technology, cultivation of good digital habits as a nudge in digital application or feature or online delivered intervention studies at individual level. The top left quadrant reveals the concentration around screen time, indices of digital usage and quantifying the influence of technology. Bottom right disclose digital skills and digital inequality. Key themes emerging from clustering are ‘Digital Wellbeing and Self-regulation’ - Individual level quantification & Self- monitoring tools, Mobile Devices and Too much connection’, Mental, Physical and physiological symptoms of technology’.

### 3.8 Topic Evolution over the years

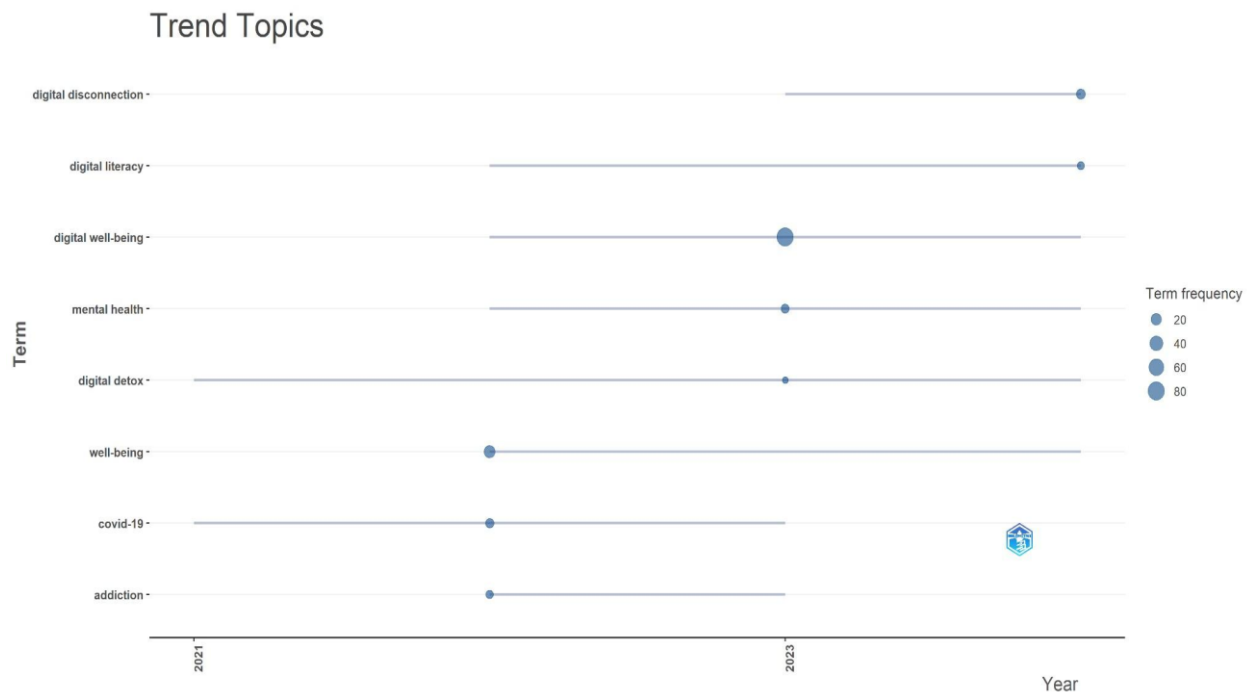


Figure 8: Trending topic over a period of time

The trend analysis of the most frequent words in abstract revealed, 'Digital Disconnection', 'Digital literacy', 'Digital wellbeing' as top 3 most occurring words from 2022 to 2024. It shows growing interest of academicians to understand the impact of technologies, solutions to neutralize the harmful impact and an urge to understand the causality mechanism of detox interventions among adolescent, female and employees. Covid 19 accelerated the presence of technology among the lives of people. From understanding the impact of Covid19 on mental health in early 2020's to gradually seeking solutions to overcome the obstacles, themes are evolving gradually.

## **Summary of Bibliometric analysis results:**

*Table 5: A summary of results*

| <b>Bibliometric Analysis</b>    | <b>Results</b>                                                                                                                                          |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Methodology                     | SPAR-PLS                                                                                                                                                |
| Database for Data Collection    | Scopus and Web of Sciences                                                                                                                              |
| Final No. of Documents          | 185                                                                                                                                                     |
| Software Used                   | Biblioshiny (Biliometrix R)                                                                                                                             |
| Number of Publication over time | From 1 in 2016 to 60 in 2024                                                                                                                            |
| Top Journals                    | MOBILE MEDIA \& COMMUNICATION with 7 articles followed by BEHAVIOUR \& INFORMATION TECHNOLOGY with 5                                                    |
| Top Authors                     | Mariek M P Vanden Abeele with 7 scientific work foll. by Raian Ali                                                                                      |
| Top Nations                     | US(83) & UK (35) with 8th India having 18                                                                                                               |
| Top Institutions                | University of Amsterdam and Boston Childrens Hospital                                                                                                   |
| Single-authored docs            | 32                                                                                                                                                      |
| Most Impactful Publications     | Social Connectedness, Excessive Screen Time During COVID-19 and Mental Health: A Review of Current Evidence<br>Digital Wellbeing as a Dynamic Construct |
| Developed Themes                | NA                                                                                                                                                      |
| Niche Themes                    | Digital Detox; Self Control Tools; problematic Smartphone                                                                                               |
| Developing or Emerging themes   | Digital Disconnection; Screen time; Digital Wellness ; Mental Health                                                                                    |
| Prevalent themes                | Psycholgical Wellbeing; Digital media; Digital Inequality                                                                                               |
| Most Cited Authors              | Mariek M P Vanden Abeele<br>Apurva Kumar and Pragya Lodha                                                                                               |
| article                         | 156                                                                                                                                                     |
| article; early access           | 16                                                                                                                                                      |
| review                          | 13                                                                                                                                                      |

## **4. THEORETICAL LENS:**

| THEORY                                                                                                                                             | References & Authors                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Effort-Recovery Model                                                                                                                              | Turja Tuuli; Jari J Hakanen                    |
| Coping theory and boundary management theory                                                                                                       | Raphaël Semaan; Urs Nater ;<br>Raphael Heinzer |
| Job-Demand Resource Theory                                                                                                                         | Multiple                                       |
| Signalling Theory: CDR<br>Corporate digital responsibility (CDR) urges organizations to implement digital wellbeing initiatives to protect workers | Sünje Clausen                                  |
| Autonomy                                                                                                                                           | Muhammad Zeshan                                |

Our review has extracted the dominant theories used to explain the dynamic construct of “Digital Wellbeing” of employees in digitized work. Theories utilized in the past include corporate development responsibility for knowledge work as a flag alarm for synchronous technological and social i.e. employee welfare (Clausen, Braun and Stieglitz, 2023).

CDR as an extended organization's responsibilities inclusive of ethical challenges and opportunities of digitalization (Herden *et al.*, 2021)

### **JDR or Job Resource Demand Theory:**

Widely utilized by organizational psychologists to explain the time lag or hinderances for employee to recover from stressor to replenish resources due to excessive Job demands. Specifically, rapidly changing technology and hyperconnectivity has led to physiological, physical, emotional and subjective wellbeing of employees at stake. Due to less time to restore resources, it has long term implication for employees' health and wellbeing. This theory pins the underlying problem and solution in repoint to connectivity due to mobile devices. Such as limiting the frequent e-mail checks can contribute to reduced stress (Kushlev and Dunn, 2015; Pansu, 2018) 'Right to Disconnect' have a significant impact on an individual's higher productivity and performance; thereby mitigating the negative habitual behaviour developed in the technological driven changing nature of work.

### **Boundary Management Theory:**

From work-family conflict to work-life balance, it has been able to explain the underpinning spillover effect as a result of flexibility gained from the advanced technology. There is a need to empirically capture IT mindfulness (Thatcher *et al.*, 2018) as a personality trait to be developed for balanced use for technology differentiating personal from professional usage during non-work and work hours. Temporary digital disconnection from work motivations, when and its positive effects contributing to digital wellbeing of employees (Vanden Abeele *et al.*, 2024)).

### **Autonomy:**

The autonomy of employees has been compromised, due to compulsive disorder being built up as a result of lack of healthy interaction with workplace technologies. With the pervasiveness of innovative technology, Employees are experiencing dilution of autonomy and identity, techno complexity, techno -uncertainty as a stressor thereby task-technology disequilibrium is established.

### **Theory of Planned Behaviour:**

A solution centric approach to have deliberate steps by individuals or potential of organization to nudge the employee for establishing a safe and healthy technologically driven working environment for its employees.

### **Communication theories:**

On one edge where industry 4.0 has introduced with the integration of cyber physical system offering huge flexibility, enabled continued business operation during tough times like covid. The other contrasting edge has led to too much communication and policy implications such as 'Right to disconnect' as human right law for employees.

## **PROPOSED THEORY:**

### **Theory of technology dominance:**

Arnold and Sutton suggest TTD which investigates how advanced technology goes from aiding the decision making to degradation. In the beginning technology can support the decision-making process as we continue to rely more on technology, it holds the potential to give rise to over-reliance on technological output thus negative consequences including skills depletion. This theory can be applied in the evolutionary stage of technological advancement to assess, identify the potential negative outcomes and mitigate for a healthy relationship in the continued

digitalization of workplaces. It can support the possibility of eliminating overriding human development over technological advancement. Thus, giving rise “Digital Wellbeing” of employees and concerned stakeholders.

**Person-Technology Fit Model, an extension to Task-Technology Fit** (Goodhue and Thompson, 1995) The workplaces where static skills are gradually becoming redundant, tasks in a job are loosely demarcated. With evolution of technostress as a threat to the employers. There is a need to assess and work towards establishing the person-technology fit, it can enable the training needs encouraging the wellbeing of employees. Forecasting a list of skillsets matching the innovative technology for existing employees is unforeseeable in the rapidly changing modern workplaces. However, to ensure the wellbeing of employees, employers need to deploy the right human resources at the evolving jobs. To overcome the fear of complex technology, a person-technology model can utilize to establish a healthy co-development of people and technology.

Having the wrong person using the right technology will result in ineffectiveness. However, taking the individuals from struggling at the job to consider techno-stressor as a challenge for thriving the state of individuals can have strategic competitive advantage.

In the amoebic task structure, a person holds the potential of learning ability, having the right person for the right technology will aid to fit person-task.

**UTAT Unified Theory of Acceptance and Use of Technology** (Venkatesh *et al.*, 2003)

It has examined the ease of use corresponding to effort and performance expectancy by presenting a unified view from adoption to utilization of technology. Complimentarily from adoption to adaptation of technology at workplaces, it holds the potential to have interventions, nudges and re-align the existing change management processes in respect to individuals state and reaction to the enable an effective adaptation by addressing the stressors.

From technology acceptance to utilization, negative consequences must be mitigated to establish a sustainable relationship with technology. The life cycle of employees must be aligned well for the ease of adoption, adaptation and balanced utilization of digitalised work processes.

UTAT can be used to trace the state of employees from adoption to adaptation thereby presenting an opportunity to navigate strains challenging employee wellbeing in the continued advancement of technology.

*Table 6: Table showing summary theoretical lens*

| Contributor & Year       | Theory                       | Focus                                                               | Relevancy to DWB                                             | Scope for extension                                                             | References                                       |
|--------------------------|------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------|
| Bakker & Demerouti, 2017 | JD-R (Job Demand Resource s) | Job strain; Job demand and resources imbalance; replenishment issue | Pinpoint digital exhaustion, burnout and recovery phenomenon | Technostress as demand and individual level resources from a replenishment view | Demerouti et al., 2001; Bakker & Demerouti, 2017 |

|                                                   |                                                           |                                                                                                    |                                                                                                                                     |                                                                                                                           |                                                   |
|---------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Ashforth, Kreiner, & Fugate ,2000                 | Boundary Management Theory                                | Work-life Boundary creating and management                                                         | Highlights need for disconnection, policies and digital detox                                                                       | Creation and management of boundaries in techno-driven work                                                               | Ashforth et al., 2000; Vanden Abeele et al., 2024 |
| <b>PROPOSED THEORIES</b>                          |                                                           |                                                                                                    |                                                                                                                                     |                                                                                                                           |                                                   |
| <b>Contributor &amp; Year</b>                     | <b>Theory</b>                                             | <b>Focus</b>                                                                                       | <b>Relevancy to DWB</b>                                                                                                             | <b>Scope for extension</b>                                                                                                | <b>References</b>                                 |
| Vicky Arnold and Steve G. Sutton, 1998            | Technology Dominance Theory (TTD)                         | Overdependence of technology and technology drives functionalities                                 | surface the risk of overdose of technology in long run                                                                              | From overdependence to co-advancement of technology, people and work                                                      | Arnold & Sutton, 1998                             |
| Goodhue & Thompson, 1995 (Task Tech. Fit)         | Person–Technology Fit (extension of TTF)                  | A compatibility matches individual capabilities and tech. demands                                  | Focus on effective alignment of person is to technology for stress mitigation                                                       | Need for recruitment and training strategies                                                                              | Goodhue & Thompson, 1995; Tarafdar et al., 2019   |
| Viswanath Venkatesh, James Y.L. Thong, and Xin Xu | UTAUT (Unified Theory of Acceptance and Use of Technology | Understanding the dynamics of utilization of technologies; from accepting, adoption to performance | An advanced approach to explain from utilization end of technology rather than just acceptance; Holds potential to extend TAM model | From adoption view to utilization reality                                                                                 | Venkatesh et al., 2003                            |
| Ajzen, 1991                                       | Theory of Planned Behavior (TPB)                          | Intentional behavioral regulation; pro-activity (Individual level redressal)                       | Supports individuals' level intentional sustainable behavior in techno-work; Healthy digital habit formation                        | Aligning interventions of organization to drive individuals' proactive behavior for healthy relationships with technology | Ajzen, 1991                                       |

|                                       |                        |                                                                         |                                                                                                                   |                                                           |                                             |
|---------------------------------------|------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------|
| Richard Daft and Robert Lengel, 1980s | Communication Theories | Cognitive overload; processing of constant connectivity and information | Reflects on the need for amendments in laws, rules and regulations as per modern workplaces (Right to disconnect) | Re-alignment of laws and regulations for modern workforce | Daft & Lengel, 1986; Mazmanian et al., 2013 |
|---------------------------------------|------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------|

## 5. DISCUSSION THEORY:

This review has added to theoretical understanding of intersection of digital transformation of workplaces and its influence on employee well-being from multiple lenses.

It has further summarized used theories and enlisted plausible extension to the frameworks such JD-R and Boundary Management theory. It has captured the evolving meaning of well-being thereby advancing contemporary theories by contextualizing disruptive technological advancement.

Further, it highlights the evolving theme in respect to evolving definition of wellbeing and adds to the literature of triadic interaction between individual, technology and workplace wellbeing. By synthesizing the existing scholarly work, the article provides a direction for theorizing digital wellbeing in this hyperconnected world and mechanism for interventions.

### PRACTICE:

This review contributes to the mapping evolving meaning ascribed to well-being at workplaces in the omnipresence of technology. It particularly focusses on the shift of lens from adoption (early stage) of technology to utilization (active/usage) of technology at workplaces.

The article offers strategic insights for the organizational leaders for addressing the challenges surfaced as omnipresence of technology and to humanize work in midst of digitalization of work. With the focus of human-technological co-evolution it provides a fresh perspective for the leaders to re-define HRM structures, practices and intervention to support employee well-being and health in the ubiquitous technology. By pinpointing the strains, the study brings attention to the pro-active behavior as a mechanism such as work-load governance, digital disconnection norms, and mindful consumption of technology to tackle the tech-induced strains. For business leaders and practitioners, it gives a kaleidoscopic view of wellbeing in technologically driven work and proposes need to intervene through effective interventions for a balanced and healthy workforce.

### SOCIAL:

At social level, this study surfaces the co-advancement of technology and humans with need to humanize work in omnipresence of technology. It brings the need for industrial relations transformation as a proactive measure for smooth adoption of industry 4.0. By framing Digital wellbeing as moral, ethical responsibility, this study invites multi-stakeholder negotiation such as policy makers, unions, and business organizations in shaping and realizing the modern-day workplaces.

## **ACTIONABLE RECOMMENDATIONS**

### Limitations:

Due to lack of primary qualitative insight from various stakeholders, only an artificial skewed picture of literature can be presented. Quantitative insights using bibliometric analysis has the shortcoming of capturing the evolving state of ‘Digital Wellbeing’ for employees. As a research gap and future direction lack literature trying to represent the alarming interest of employees and social problems can be explored.

Furthermore, the coverage of literature is limited to ‘Scopus’ & ‘Web of Sciences’ published in English, which may eliminate the quality literature available in Japanese or European languages. Since the impact can be traced from developed countries; interventions rooted in religious scripture, it presents an opportunity for finding the true solution.

Future research can combine academic literature with in-depth interviews of different stakeholders including professionals, academicians, business leaders, HR experts and employees to get a complementary understanding of Digital Wellbeing from a multi stakeholder perspective.

### Future Direction:

The concern worthy assessment of existing literature is the deficit of causal evidence of digital media usage and wellbeing (Büchi, 2024). There is a need to probe into camouflaged long-term implications of technology at the workplace for employees. With drivers of advanced technological advancement in industry, it opens an opportunity for developing countries to simultaneously uncover the emerging impact of usage of technology at the workplace thus preparing for intervention for the wellbeing of people.

A significant attention is required for TVET for developing Digital capabilities at teacher training and education level a, to create digitally literate assets for the country (UNESCO, 2022).

There is a need to examine the nature of Well Being i.e., ‘Digital Wellbeing’ of employees at the workplace which surfaced as a result of Covid19 pandemic.

In hunt to find the ‘why’ and ‘what’ of Digitalization of the workplace as a grand challenge, need for a theoretical framework of DWB subsuming the complicated interconnection of technologies, human behavior, and summated wellbeing of employees. There is a need to assess the contributing factors at individual and organizational level and explanatory mechanisms to evaluate the existing and potential consequences of Digitised (Ren, Chowdhury and Budhwar, 2025) .

Quantifying DWB poses a challenge due to lack of instruments to capture it in its true essences and holds ability to distinguish it from other existing wellbeing facets (Ren, Chowdhury and Budhwar, 2025). However, it needs to be proceeded by mutual conceptual clarity across the disciplines.

Workplace interventions exploring the effectiveness of policies, individual trait and organizational level awareness to combat the challenge of ensuring the balanced interaction of technologies. In turn, it will enable business organizations to find sustainable digital practices for employee wellbeing.

Investigating the motivators, interconnection of individual level and situational based disconnection to answer the why, when and to what extent individuals disconnect as promising future research (Klingelhoef, Gilbert and Meier, 2024).

Future research can investigate in-depth the evolving meaning, operationalization and HR practices from multi-stakeholder lens to contribute to the health workplaces and sustainable wellbeing practices.

## **6. Conclusions**

In this paper we have traced the scattered scientific literature emerging around a new facet of wellbeing as a result of Digitization of workplaces. The mapping shows themes such as 'Digital Detox Intervention', Digital Disconnection Policies and Laws, 'Screen Time' and 'Mobile Connectivity' as an obstacle to co-advancement of technology and people. The results pinpoint the gap that exists in respect to the wellbeing of the future workforce and the dire need for multidisciplinary research to be conducted.

By addressing the concerns highlighted, it has the business implication of ensuring quality employee experiences in the chaos of continuously changing digital demands (Ren, Chowdhury and Budhwar, 2025). This study has contributed by synthesizing the existing literature for a bird's eye view, to have a vision for the future, to address the challenges faced by employees thus devising strategies and theoretical changes. Its findings will enable concerned stakeholders to look for solutions at an emerging stage thus driving a sustainable performance-oriented existence of the business organizations. It will encourage management to re-align, redefine, policies, practices, processes and intervene for the resilient and wellness of the future workforce. The key emerging themes include human-technology interaction, digital wellbeing and work life balance including alarming mental health issues in highly automated technology driven workplace ecosystems, skills, and competency (Technical and cognitive capabilities) development and culture of continuous learning and adaptation. The strategic role of HR is the transition. A representative of ethical concern to bring the changes in legal side for a systematic and robust redressal.

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