

Redefining Cyberloafing in a Blended Life Era: A Systematic Literature Review and Conceptual Model for Flex-work Contexts

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Abstract: Cyberloafing that is traditionally defined as non-work use of digital technologies by employees during working hours, has been widely studied in conventional office-based settings. However, the rapid expansion of flex-work arrangements has fundamentally altered how work is organized, blurring temporal, spatial, and psychological boundaries between work and non-work lives. In such contexts, existing definitions of cyberloafing grounded in fixed working hours and clear work–life separation are increasingly inadequate. Thus, this study addresses a critical definition gap by conducting a systematic literature review of 22 peer-reviewed studies published between 2000 and 2025. Building on PRISMA-2020 guidelines, the review synthesizes how cyberloafing has been conceptualized and operationalized across different work arrangements. The findings reveal four dominant definitional clusters: time-anchored, resource-anchored, role-anchored, and recovery-oriented, and demonstrate a persistent misalignment between prevailing definitions and contemporary flex-work realities. Building on this synthesis, the study proposes a revised, role-sensitive & context-sensitive definition of cyberloafing, and an integrative conceptual model that distinguishes role-interfering cyberloafing from context-neutral and integration-oriented personal ICT use. The paper advances theory by aligning cyberloafing research with work–life integration and boundary perspectives which in turn offers clear implications for future measurement, empirical research, and managerial practice in flexible and blended work contexts.

Keywords: *Blended life; Cyberloafing; Flex-work; Work–life integration*

Introduction

The phenomenon of employees using organizational information and communication technologies for personal, non-work purposes during work hours, which is commonly labelled cyberloafing or cyberslacking has been studied for over three decades (Garrett & Danziger, 2008; Blanchard & Henle, 2008). The extant research defined cyberloafing in relation to the workplace and working hours, emphasizing voluntary non-work internet use through resources of the employer (Lim, 2002). Many of the empirical studies up to date have operationalized cyberloafing as non-work digital activity occurring during designated work time or while on the employer’s network (Vitak,

Crouse, & LaRose, 2011; Lim & Chen, 2012).

However, the immense diffusion of flexible and digital forms of work challenges the temporal-spatial assumptions embedded in those classic definitions. Over the last decade, accelerated by the COVID-19 epidemic (Lim & Teo, 2024), a large segment of the workforce adopted remote, hybrid, and other types of flexible schedules that decouple the once-clear boundaries between “workplace” and “non-work” contexts (Kossek, Perrigino, & Lautsch, 2023). In many flexible arrangements employees experience temporal, location, and operational flexibility: where, when, and how tasks are done can vary day-to-



day and are often negotiated with managers and automated systems. This change means that the definition segment; *“during working hours at the workplace”* is ambiguous for millions of employees who no longer share synchronized office hours or a single physical work location (Lim & Teo, 2024).

Further, conceptually related shift is another rise of work–life integration and blended life orientations. For many flex workers, work no longer sits on one side of a boundary; instead, professional and personal spheres are continuously interleaved. Scholars characterize this as an erosion of clear role boundaries, greater permeability and continuity between life domains, so that work becomes one thread woven through everyday life rather than a separate sphere (Kossek et al., 2023; Pensar, 2023). Under these conditions, behaviors that used to be clearly *“personal”* could be performed in line with job duties without time-based separation, complicating the notion of what constitutes *“cyberloafing.”*

Similarly, technology and monitoring practices have evolved. Mobile devices, cloud platforms, and asynchronous collaboration tools mean that task completion and availability are increasingly decoupled from physical presence. At the same time, monitoring and algorithmic evaluation might track output rather than time-on-task (Tandon et al., 2021). This shift influences both the opportunity structure for non-work digital activities, and employers’ evaluative frames focusing on outcomes rather than time (Pensar, 2023). Consequently, using a clock-based *“during working hours/times”* definition risks misclassifying many behaviors. For example, a worker answering a personal message between two short deliverable-focused tasks from a café might be judged differently under time-based versus role-based definitions.

Empirical evidence shows that meanings and motives behind personal-use behaviors are mixed. cyberloafing can function as respite, recovery, social connection, or counterproductive deviance depending on context (Liang et al., 2022; Lim & Teo, 2024). For flex-workers, the same behavior might be recovery-oriented and supportive of later performance in one context yet represents shirking in another. Relying on a single, time-anchored conceptualization obscures this nuance and limits the explanatory power of antecedent and outcome models (Tandon et al., 2021; Lim & Teo, 2024).

Having considered the above reported evidence, it is clear that these changes create a strong definition gap. The existing cyberloafing definitions assume bounded work times and places that they do not accommodate: (a) flexible temporal arrangements, (b) work embedded into daily life, which is blended, and (c) outcome-based performance evaluation that makes *“time spent”* an increasingly poor proxy for productive effort. For researchers and practitioners, this gap has three consequences. First, empirical prevalence estimates of cyberloafing in flexible populations are likely unreliable because instruments and cut points were developed for traditional settings. Second, theories of antecedents and outcomes might operate differently when the concept is reframed in blended contexts. Third, policy prescriptions and managerial controls derived from office-based research might be ineffective & harmful, when applied to flex-workers whose productivity is not tied to monitored time (Akbulut & Eristi, 2018).

This study addresses those gaps by conducting a Systematic Literature Review (SLR) that explicitly interrogates how cyberloafing has been defined and measured across different work arrangements, with a special focus on flex-workers; employees who have job designs characterized by location,

temporal, and operational flexibility, and who commonly report blurred work–life boundaries (Akbulut & Al-Qudah, 2016). This SLR serves two linked purposes: (1) to map conceptual and operational definitions of cyberloafing and identify boundary assumptions embedded in each; and (2) to develop a refined, context-sensitive definition and typology of cyberloafing appropriate for flexible and blended life work arrangements. Doing so will clarify measurement gaps, inform theory building, and provide actionable guidance for researchers and organizations seeking to study and manage non-work ICT use in contemporary flexible workforces (Lim & Teo, 2024; Tandon et al., 2021; Kossek et al., 2023).

In the coming sections the current study: (a) describes the systematic search and selection strategy; (b) extract and compare the definitional language, temporal/spatial assumptions, and operational measures used in prior studies; (c) synthesize antecedents/consequences evidence separately for traditional and flex work samples; and (d) propose an integrated, testable working definition and conceptual model relating to cyberloafing among flex-workers that distinguishes temporal-anchored cyberloafing, role-anchored cyberloafing, and integration-context personal ICT use. This approach will bridge the current definitional gap and create a foundation for rigorous empirical work on cyberloafing in the era of flexible, blended work.

Objectives of the Study

Below-mentioned three objectives were established to be achieved in the current study.

1. Identify and categorize how cyberloafing has been defined and operationalized in empirical & conceptual literature.
2. Synthesize evidence on antecedents and consequences of cyberloafing across studies that sample traditional office workers, hybrid workers, and explicitly flex-workers.
3. Propose a refined, theoretically grounded definition and typology of cyberloafing that is most suitable for flex-workers.

The rest of this manuscript is outlined as follows: In the next section, the adopted methodology in the current study is presented. Next, the results are discussed, emphasizing their theoretical, methodological and practical implications along with the definition clusters, proposed definition, and conceptual model for future empirical studies. The final section comprises of the concluding remarks, limitations of the current study, and the directions for future studies.

Methodology

Research Design

This study adopted a Systematic Literature Review (SLR) design to synthesize and critically evaluate existing conceptualization and operationalization of cyberloafing in the context of flexi-work arrangements. An SLR was selected as the primary purpose of this study is theory refinement, identifying definitional inconsistencies, boundary assumptions, and conceptual gaps rather than assessing the impact. Systematic reviews are mainly suitable for addressing construct clarity and conceptual development in fragmented research streams (Paul & Criado, 2020; Tandon et al., 2021). Thus, this review followed the PRISMA-2020 guidelines to ensure transparency, replicability, and methodological rigor (Page et al., 2021).

Data Sources and Search Strategy

A comprehensive and structured search was conducted across five major academic

databases: Scopus, Web of Science Core Collection, PsycINFO, Business Source Complete (EBSCO), and ScienceDirect. These databases were selected because they collectively provide broad coverage of management, organizational behavior, psychology, and information systems literature, where cyberloafing research is primarily located.

The search strategy combined keywords related to cyberloafing with terms associated with flex-work arrangements. Key search strings included combinations of the following terms:

“Cyberloafing, cyber slacking, personal internet use at work, non-work ICT use”

“Flexible work, remote work, hybrid work, telework, work–life integration, boundary less work”

Boolean operators [*“AND/OR”*] were applied to maximize sensitivity while maintaining relevance. Searches were conducted in titles, abstracts, and keywords of the articles published in English. The initial search was completed in January 2026, covering publications from 2000 to 2025, reflecting the period from the emergence of the cyberloafing construct to the most recent flexi-work research studies (Lim, 2002; Kossek et al., 2023).

Inclusion and Exclusion Criteria

The inclusion and exclusion criteria of the current study were determined in line with prior high-quality cyberloafing reviews, and construct-focused SLRs (Tandon et al., 2021; Lim & Teo, 2024). Table 01 summarizes the inclusion and exclusion criteria.

Table 01: Inclusion and Exclusion Criteria

Dimension	Inclusion Criteria	Exclusion Criteria
Publication type	Peer-reviewed journal articles	Conference papers, book chapters, dissertations, editorials, practitioner / consultancy reports, book reviews
Language	English	Languages other than English
Time period	Between 2000 and 2025	Before 2000
Context	Organizational / work-related settings	Purely educational or student samples without organizational relevance
Construct focus	Explicitly examines cyberloafing, cyber slacking, personal internet use at work, or closely related constructs	Studies focused solely on general internet addiction, social media addiction, or problematic ICT use without a work context
Conceptual clarity	Provides a clear conceptual definition or operationalization of cyberloafing or related behavior	Lacks definitional clarity or does not specify how the construct is conceptualized or assessed
Work arrangement	Traditional, remote, hybrid, and/or flex-work arrangements, or is theoretically applicable to flex-work contexts	Exclusively examines tightly controlled or work contexts where ICT use is not integral to job roles
Methodological transparency	Empirical or conceptual studies with sufficient methodological	Studies with insufficient methodological information or inaccessible full text

Dimension	Inclusion Criteria	Exclusion Criteria
	detail for extraction and synthesis	
Outcome relevance	Examines antecedents, outcomes, or contextual interpretations of cyberloafing	Mentions cyberloafing only tangentially without analytical focus

Source: Author, 2026

Study Selection Process

The study selection followed a three-stage screening process. First, duplicate records were removed. Second, titles and abstracts were independently screened for relevance against the inclusion criteria. Third, full-text screening was conducted to confirm eligibility and extract definitional and contextual details. Throughout the screening process, specific attention was paid to identifying whether studies explicitly or implicitly assumed ‘*fixed work time, fixed work location, or clear work–life boundaries*’, as these assumptions are central to the definitional gap addressed in this review. Disagreements during screening were resolved through re-examination against the inclusion criteria, consistent with best practices for qualitative synthesis (Page et al., 2021).

PRISMA-flow Description

The initial database search yielded a total of 248 records. After removing 38 duplicate records, 210 unique studies remained for title and abstract screening. During this screening stage, 111 records were excluded primarily due to their focus on general internet or smartphone addiction without a work context, exclusive reliance on student samples, or lack of cyberloafing as a core construct. The remaining 99 articles were subjected to full-text assessment, of which 77 were excluded because they lacked clear definitional or operational detail of cyberloafing, provided insufficient methodological information, or examined contexts where ICT use was not integral to job roles. Consequently, 22 studies met all inclusion criteria and were retained for the final qualitative synthesis. Figure 01 depicts the PRISMA-flow diagram.

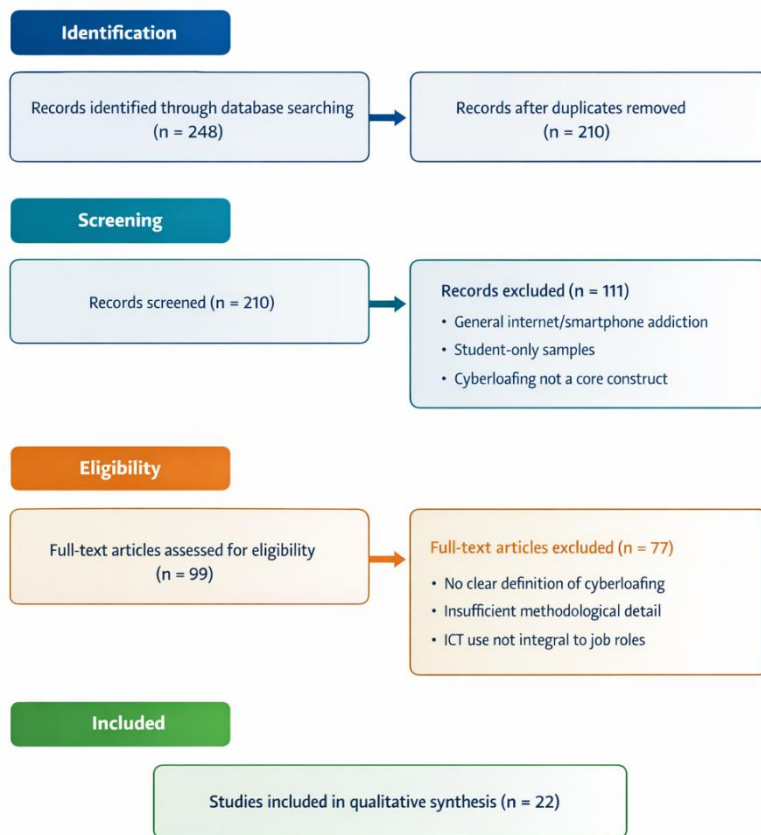


Figure 01: PRISMA-flow Diagram

Source: Author, 2026

Data Extraction and Coding

A structured data extraction protocol was developed to ensure consistency and analytical depth. For each included study, the following information were extracted.

- Bibliographic details (*author/s, year of publication, journal name*)
- Disciplinary orientation (*management, psychology, information systems...*)
- Definition/s of cyberloafing
- Operational measures (*dimensions, scales, items, behavioral indicators...*)

- Assumed temporal, spatial, and role boundaries
- Work arrangement context (*traditional/office, remote, hybrid, flexible...*)
- Mentioned antecedents, and outcomes

Extracted definitions were coded using direct qualitative content analysis, allowing both theory-driven and inductive category development (Hsieh & Shannon, 2005). Initial coding categories were derived from the boundary theory and prevailing cyberloafing definitions (Lim, 2002; Kossek et al., 2023), while new categories emerged iteratively during the analysis.

Synthesis and Analytical Strategy

Rather than aggregating the effects, the synthesis emphasized conceptual comparison and pattern identification. Definitions and measures were systematically compared across work contexts to identify (a) dominant definition logics (*time-based, resource-based, role-based*), (b) implicit assumptions about work–life boundaries, and (c) mismatches between conceptual definitions and contemporary flex-work realities in a blended life era.

The synthesis proceeded in three stages. First, ‘definition clusters’ were identified and mapped chronologically to trace conceptual development. Second, definitions and measures were contrasted between studies sampling traditional office workers and those sampling flexible or remote workers. Third, insights from boundary theory and work–life integration research were used to reinterpret cyberloafing behaviors in blended life contexts, leading to the development of a refined, context-sensitive definition framework (Paul & Criado, 2020; Lim & Teo, 2024).

Methodological Rigor and Transparency

To enhance rigor, this review adhered to PRISMA-2020 reporting standards, including explicit documentation of search strategies, inclusion criteria, and synthesis logic (Page et al., 2021). Although inter-rater reliability statistics were not applicable due to the definition-building focus of this review, coding process was systematically documented to ensure auditability. The methodological approach aligns with recent calls for more conceptually rigorous reviews in organizational research, mainly where constructs are evolving in response to changing work arrangements (Paul & Criado, 2020; Page et al., 2021; Lim & Teo, 2024).

Results and Discussion

The final sample comprised 22 studies published between 2000 and 2025. Most studies originated from the fields of organizational behavior, information systems, and applied psychology. Early studies from 2000 to 2010, were predominantly conducted in traditional office environments, whereas post-2020 studies increasingly included remote, hybrid, and flex-work arrangements. Despite this contextual shift, majority of the studies continued to rely on legacy definitions of cyberloafing developed for time-bounded, and location-bounded contexts.

Across the sample, substantial heterogeneity was observed in how cyberloafing was conceptualized, defined, and operationalized. However, definition approaches could be systematically grouped into four dominant clusters, reflecting distinct underlying logics about *work, time, and role expectations*.

Definition Cluster 01: Time-anchored (working-hours-based) Definitions

The most prevalent definition cluster conceptualizes cyberloafing as non-work-related ICT use of employees during working hours/times. This approach dominated early research and remains widely used in empirical studies, even in recent years. Definitions in this cluster explicitly rely on the assumption that working time is clearly demarcated and that deviations from task execution during that time constitute loafing behavior (Ashforth et al., 2000).

Typical definition language in this cluster emphasized three major phrases: “*during work hours*,” “*while at work*,” and “*instead of working*.” Measurement instruments aligned with this logic typically asked respondents to report how frequently they engaged in personal internet activities during working hours.

So, the measurement instruments are anchored on frequency-based scales.

While time-anchored definitions provided clarity and simplicity in traditional office contexts, synthesis revealed that they become increasingly problematic in flex-work arrangements where employees self-schedule tasks, work asynchronously, or interleave personal and professional activities throughout the day. In such contexts, the meaning of “*working hours*” becomes ambiguous and subjectively constructed, undermining the validity of time-based operationalization.

Definition Cluster 02: Resource-anchored (organizational ICT misuse) Definitions

The second cluster identified cyberloafing as the use of organizational ICT resources for non-work purposes, irrespective of time. These definitions emphasized ownership and authorization rather than temporal boundaries, framing cyberloafing as a form of resource misuse or policy violation (Tandon et al., 2021; Kossek et al., 2023). Studies adopting this approach often focused on employer-provided networks, devices, and software systems. Measurement items asked whether employees used company internet, devices, and software for their personal use (Chen & Li, 2020).

Although resource-anchored definitions partially decouple cyberloafing from time, they implicitly assume a distinction between “*organizational*” and “*personal*” ICT resources. This assumption is increasingly tenuous for flex-workers who rely on personal devices, cloud-based platforms, and mixed-use technologies. As a result, this cluster inadequately captures cyberloafing behavior in the contexts where device ownership and usage overlap.

Definition Cluster 03: Role-anchored (performance interference) Definitions

This is a smaller but significant cluster that conceptualized cyberloafing as personal ICT use that interferes with role expectations, task/job performance, and productivity, regardless of when or where it occurs. Rather than focusing on clock time or resource ownership, these definitions emphasized a deep functional impact. Studies in this cluster often framed cyberloafing as Counterproductive Work Behavior (CWB) or deviant workplace behavior, measuring it in relation to delays, errors, reduced concentration, and failure to meet performance expectations & deadlines (Askew et al., 2014).

The synthesis suggests that role-anchored definitions are more adaptable to flex-work contexts as they align with outcome-based performance evaluation. However, they also introduce subjectivity, as judgments about “*interference*” depend on task type, level of autonomy, and managerial expectations. Despite these challenges, this cluster provides a critical conceptual bridge toward redefining cyberloafing in flex-work contexts.

Definition Cluster 04: Recovery-oriented and Integration-aware Definitions

This is the most recent and least represented cluster that acknowledged the personal ICT use during work might serve adaptive & recovery functions, mainly in high-autonomy and flexible roles. Rather than labeling all non-work ICT use as loafing, these studies differentiated between harmful, neutral, and potentially beneficial loafing behaviors (König & Caner de la Guardia, 2014; Fuglseth & Sørensen, 2014). Definitions in this cluster explicitly reference emotional regulation, micro-breaks, or psychological recovery. Some studies argued that brief personal ICT use could enhance subsequent focus, and even mitigate technostress (Jena, 2015; Wu et al., 2020).

This cluster challenges the moralized framing of cyberloafing as inherently deviant and is conceptually aligned with work–life integration, and modern blended life perspectives. However, synthesis revealed that most of these studies still relied on older measurement scales, resulting in a mismatch between conceptual strength and empirical operationalization.

Cross-cluster Synthesis

Comparative synthesis across clusters reveals a fundamental definition gap. Most cyberloafing research continues to assume: (a) fixed working hours, (b) a clear spatial separation between work and non-work lives, and (c) discrete work–life boundaries. These assumptions do not

hold for flex-workers whose work is embedded within daily life and evaluated primarily through performance rather than time spent or the location. As a result, behaviors that would be classified as cyberloafing under time-anchored definitions might be functionally irrelevant in blended work contexts (Markowitz et al., 2019).

The synthesis therefore indicates a need to move from time-based and location-based definitions toward role-sensitive and context-sensitive conceptualizations that account for work–life integration, autonomy, and outcome-based performance. Table 02 depicts the definition clusters of cyberloafing identified in the current SLR.

Table 02: Definitional Clusters of Cyberloafing Identified in the SLR

Cluster	Definition Logic	Key Assumption/s	Strengths	Limitations for Flex-workers
Time-anchored	Non-work ICT use during working hours	Fixed schedules; clear work time	Simple; easy to measure	Working hours ambiguous in flex-work
Resource-anchored	Personal use of organizational ICT resources	Clear separation of work vs personal ICT use	Useful for policy enforcement	Personal and work related devices are often blended in flex-work
Role-anchored	ICT use that interferes with role / job performance	Output-based performance evaluation	Partially adaptable to flexi-work	Subjective judgment of interference with job performance
Recovery / integration-aware	Personal ICT use as recovery mechanism	Blended work–life boundaries	Conceptually strong	Limited empirical operationalization

Source: Author, 2026

The results demonstrate that cyberloafing is not a unitary construct, but a historically situated concept shaped by assumptions about how work is organized. The dominance of time-anchored definitions persists despite profound changes in work designs. This synthesis provides the empirical and conceptual foundation for

developing a revised definition and typology of cyberloafing for flex-workers, which is presented in the subsequent section.

Proposed Definition and Conceptual Model

Rationale for a Revised Definition

The synthesis of prior literature demonstrates that dominant definitions of cyberloafing are anchored in assumptions of fixed working hours, stable work locations, and clearly determined work–life boundaries. These assumptions are increasingly misaligned with contemporary flex-work arrangements in which employees exercise discretion over when, where, and how work is performed, and where work is continuously linked with daily life. In such contexts, time-based and resource-based definitions risk both conceptual over-reach by labeling benevolent and adaptive behaviors as deviant and construct under-reach by failing to capture forms of non-work ICT use that genuinely undermine role performance.

To address this definition gap, any revised conceptualization must meet three criteria. First, it must be boundary-aware, explicitly recognizing the permeability of work–life domains in flex-work. Second, it must be role-centered rather than time-centered, reflecting outcome-based performance evaluation common in flex-work. Third, it must be context-sensitive, distinguishing between personal ICT use that is detrimental, neutral, or adaptive depending on contingency demands. Guided by these principles and informed by the definition clusters identified in the review, this study proposes a refined definition and an integrative conceptual model for cyberloafing among flex-workers.

Proposed Definition of Cyberloafing for Flex-workers

Cyberloafing among flex-workers could be defined as:

“Discretionary personal use of digital technologies within a given work context,

meaningfully interferes with the fulfillment of role expectations, task responsibilities, or agreed performance outcomes, irrespective of when or where the behavior occurs”.

This definition departs from traditional formulations in three important ways. First, it removes explicit reference to “working hours” and/or physical presence, acknowledging that flex-workers often engage in work asynchronously, and across multiple locations. Second, it reframes cyberloafing as a role-interference phenomenon rather than a time-violation or resource-misuse behavior. Third, it treats personal ICT use as cyberloafing only when it undermines role/job performance, thereby excluding integration-oriented or recovery-supportive behaviors that do not impair work outcomes.

Role-sensitive and Context-sensitive Model

Building on the above definition, a conceptual model is proposed that differentiates three analytically distinct categories of personal ICT use in flex-work settings. These categories are not defined by ‘clock time’ or ‘device/technology ownership’ but by *functional impact and contextual meaning*.

Role-interfering cyberloafing

This category represents the core construct of interest. It includes discretionary personal ICT activities that disrupt concentration, delay task completion, reduce quality of outputs, and/or violate explicitly agreed Key Performance Indicators (KPIs). In the proposed conceptual model, this category is theorized to have negative relationships with task performance, role clarity, and perceived accountability.

Context-neutral Personal ICT Use

This category includes personal digital activities that are temporally interleaved with work but do not meaningfully affect role fulfillment or outcomes. Such behaviors might occur between tasks, during low-demand periods, or alongside asynchronous work rhythms. Importantly, these activities are neither inherently deviant nor inherently beneficial. Their classification depends on the absence of measurable interference with role expectations. Prior cyberloafing measures frequently misclassify these behaviors as loafing due to their reliance on time-based criteria.

Integration-oriented and Recovery-oriented Personal ICT Use

This category reflects personal ICT use that supports psychological recovery, emotional regulation, or work–life integration and may indirectly enhance subsequent performance. Such loafing like social interactions, informational browsing for personal coordination, or digital micro-breaks that alleviate technostress. The framework conceptualizes these behaviors as qualitatively distinct from cyberloafing, even though they occur during periods traditionally labeled as “*work time*.” Their effects are expected to be neutral or positive, mainly in high-autonomy roles.

Boundary Conditions and Contextual Moderators

The proposed model further posits that the classification and impact of personal ICT use are contingent on several boundary conditions. Job autonomy, task interdependence, performance evaluation systems, and organizational norms shape whether a given behavior is interpreted as role-interfering or acceptable. Similarly, individual differences such as self-regulation capacity and boundary management preferences influence how flex-workers integrate personal and work-

related digital activities. These contextual moderators help explain why identical behaviors might be labeled as cyberloafing in one setting and as adaptive integration in another (Kossek et al., 2023; Lim & Teo, 2024).

By repositioning cyberloafing as a context-dependent role interference construct, this model reconciles previously fragmented findings in the literature and aligns the concept with contemporary flex-work realities. It integrates insights from cyberloafing research, boundary theory, and work–life integration research findings into a unified model that distinguishes harmful from non-harmful personal ICT use without relying on obsolete temporal assumptions. This reconceptualization provides a stronger theoretical foundation for future empirical testing and resolves longstanding inconsistencies in measurements and interpretation.

Measurements and Future Research Agenda

The proposed definition and model imply that future measurements should move beyond frequency-based “*during work hours*” items toward instruments that assess actual interference with role expectations and outcomes. Survey items, experience-sampling methods, and digital trace data should be explicitly anchored to task disruption, delay, and performance degradation rather than time spent. Moreover, empirical models should test differential effects of role-interfering cyberloafing versus integration-oriented ICT use, mainly among flex-workers and hybrid workers.

Conclusion

This systematic literature review was conducted to address a growing yet underexplored problem of definition gap of cyberloafing in flex-work arrangements characterized by temporal, spatial, and operational flexibility and blurred work–

life boundaries. Synthesizing 22 peer-reviewed studies published between 2000 and 2025, the review demonstrates that cyberloafing has historically been conceptualized through time-anchored and resource-anchored lenses that presume stable working hours, fixed workplaces, and segmented life domains. These assumptions are no longer hold for flex-workers whose work is embedded within everyday life and evaluated primarily through output rather than time spent.

By identifying four definition clusters and critically comparing their underlying assumptions, this study shows that much of the existing cyberloafing literature risks conceptual misalignment with contemporary work realities. In response, the study proposes a role-sensitive and context-sensitive definition of cyberloafing, and an integrative conceptual model that distinguishes role-interfering cyberloafing from context-neutral and integration-oriented personal ICT use. This reconceptualization resolves inconsistencies in prior findings and provides a theoretically coherent foundation for studying cyberloafing in flexible and blended work contexts.

Implications

Theoretical Implications

This study makes three primary theoretical contributions. First, it repositions cyberloafing as a role-interference construct rather than a time-based deviation. This shift aligns cyberloafing theory with boundary theory and work–life integration perspectives, which emphasize permeability and contextual interpretation over rigid segmentation (Kossek et al., 2023). By doing so, the study clarifies why identical behaviors might yield divergent outcomes across different work arrangements. Second, the findings challenge the implicit moral framing of cyberloafing as inherently deviant. The synthesis

demonstrates that personal ICT use may function as recovery or regulation in flexible contexts, supporting arguments that cyberloafing effects are conditional rather than uniformly negative (Liang et al., 2022; Lim & Teo, 2024). This nuance advances cyberloafing research beyond binary good–bad classifications, and toward contingency-based theorizing. Third, by integrating insights from organizational behavior, information systems, and work–life research, the proposed conceptual model contributes to construct clarity, a critical prerequisite for cumulative theory building (Paul & Criado, 2020). The model offers a common conceptual language for future research on non-work digital behavior in evolving work designs.

Methodological Implications

The findings of the current study have significant methodological implications for cyberloafing research. The dominance of time-anchored measurement scales, many of which were developed for traditional office settings, raises concerns about construct validity when applied to flex-workers. This study highlights the need to redesign measurement instruments that assess actual interference with role expectations and performance outcomes, rather than frequency of personal ICT use during nominal working hours. Thus, future empirical studies should employ mixed methods, including experience sampling, diary studies, and objective performance indicators, to capture the contextual dynamics of personal ICT use in flex-work. Moreover, researchers are encouraged to explicitly state the work arrangement assumptions underlying their operationalization, thereby improving transparency and comparability across studies (Tandon et al., 2021).

Practical Implications

For organizations, the findings caution against the uncritical application of traditional cyberloafing controls in flex-

work settings. Such approaches might be ineffective or counterproductive when work is evaluated based on output rather than time and when employees rely on digital integration to manage blended roles. Instead, organizations should focus on clarifying role expectations, deliverables, and performance criteria, allowing employees discretion in managing their digital boundaries as long as outcomes are met. Managers should be trained to distinguish between role-interfering cyberloafing and integration-oriented digital behaviors that support recovery and sustained performance. This shift aligns cyberloafing management with contemporary flex-work practices and supports employee well-being together with productivity (Kossek et al., 2023).

Limitations

Despite the contributions, this study has several limitations. This, as a systematic literature review, is constrained by the scope and quality of existing studies. Many reviewed articles relied on self-reported measures and cross-sectional designs, limiting causal inference and potentially inflating relationships due to common method bias. Although the review incorporated studies across diverse national contexts, the majority originated from Western and East Asian settings. Cultural differences in boundary management, norms of availability, and interpretations of deviance may therefore be underrepresented, limiting the generalizability of the synthesis. While the proposed definition and the model are

theoretically grounded, they remain conceptual. Empirical validation is necessary to test whether the proposed distinctions meaningfully predict performance, well-being, and organizational outcomes in flex-work environments.

Directions for Future Studies

Future research studies should pursue four key directions. Scholars should empirically test the proposed definition by developing and validating role-interference-based cyberloafing scales and comparing their predictive validity against traditional time-based measures.

Further, longitudinal and experience-sampling studies are needed to examine within-person dynamics, capturing how personal ICT use fluctuates across tasks, stress levels, and daily work rhythms in flexible arrangements. Such designs would clarify when and why personal ICT use becomes role-interfering versus adaptive. Moreover, future studies should investigate boundary conditions, including job autonomy, algorithmic management, performance evaluation systems, and individual boundary management styles, to determine how contextual factors shape cyberloafing interpretations and outcomes. Similarly, comparative and cross-cultural research is needed to explore how societal norms and institutional contexts influence cyberloafing in flexible work. Understanding these variations will be critical as flexible and blended work models continue to expand globally.

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