

Cyberloafing in the Workplace: A Bibliometric Analysis of Two Decades of Research on Organizational Commitment and Citizenship Behaviour (2001–2025)

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ABSTRACT

This study aims to provide a comprehensive bibliometric review of the literature on cyberloafing, organizational commitment, and organizational citizenship behaviour (OCB). It examines the intellectual structure, publication trends, influential contributors, and thematic evolution of the field while identifying research gaps concerning the relationship between cyberloafing, organizational commitment, and citizenship behaviour.

A bibliometric analysis was conducted using the Scopus database covering publications from 2001 to 2025. Relevant studies were retrieved using the keywords "Cyberloafing", "Organizational Commitment", and "Citizenship Behaviour". A total of 349 publications (2002–2025) were analysed to evaluate publication trends, citation patterns, leading countries, journals, influential authors, and thematic clusters.

The findings reveal a significant increase in scholarly interest in cyberloafing research, with approximately 25% of the total publications appearing in 2025. China, the United States, and Turkey are the leading contributors to the field, while Computers in Human Behavior is the most influential journal. Lim's (2002) seminal work remains the most highly cited publication. Bibliometric mapping identifies eight major research themes, predominantly grounded in Social Exchange Theory and Conservation of Resources Theory. Despite the growing literature on cyberloafing, limited integration with organizational commitment and organizational citizenship behaviour is observed, highlighting a substantial gap for future research

Keywords: Cyberloafing; Organizational Commitment; Organizational Citizenship Behaviour; Bibliometric Analysis; Scopus; Social Exchange Theory; Conservation of Resources Theory

INTRODUCTION:

We are living in a time when we really need information technology. This time includes a lot of things that people do. The thing that really gets the attention of people who study this stuff is Cyberloafing. It affects how well Organizations work. Cyberloafing includes a lot of things such as using the Internet for stuff at work checking personal emails reading the news visiting social networking sites shopping online going to websites that are not allowed like gambling and betting downloading movies, music, software and more things that cost money. Cyberloafing is a kind of behavior, at work where workers do things on purpose that are not related to their job. They waste time and resources in a way that hurts both the workers and the Organizations. This can make the work and the things that the Organizations make not as good. (Koay, 2018; Lim, 2002; Usman et al., 2019; Ülbeği & İplik 2025)

Cyberloafing behavior includes things like browsing media shopping online reading news and playing games. Cyberloafing can really affect peoples and organizations overall productivity. This is true even though cyberloafing is often viewed as a way to take a break from tough work. Some researchers have written about cyberloafing, including Betts and others in 2014 Suranta and Hurriyati in 2019. Roz and Sawitri in 2025. These researchers usually divide cyberloafing into two types: cyberloafing and minor cyberloafing. Both cyberloafing and minor cyberloafing have an impact, on how an organization works. Cyberloafing behavior whether it is cyberloafing or minor cyberloafing can change the way an organization functions. There are lot of studies

conducted on linking cyberloafing with organizational commitment and some with organizational citizenship behaviour but still there is no study which conducted examining both of them simultaneously. The psychological connection that workers form with their employer, which reflects how much they identify with, feel emotionally invested in, and feel required to stay a part of it, is known as organizational commitment. Meyer and Allen's (1991) three-component model, which differentiates between affective commitment (an emotional attachment to and identification with the organization), continuance commitment (the perceived cost of leaving) and normative commitment (a felt sense of obligation to stay), is the most widely used conceptualization in the organizational behavior literature. Organizational commitment has been studied in the literature on cyberloafing as a result of cyberloafing as well as a dispositional factor that moderates employees inclination to engage in non-work-related online activities. Research indicates that employees with lower affective commitment are more likely to cyberloaf as a form of workplace withdrawal (Koay et al., 2017; Mercado et al., 2017).

The term "organizational citizenship behavior" describes discretionary employee behavior that goes above and beyond officially defined role requirements and enhances the organization's efficient operation without being explicitly acknowledged by the formal incentive system (Organ, 1988). Altruism, conscientiousness, sportsmanship, civic virtue, and civility are the five dimensions that Podsakoff et al. (1990) used to define OCB. Each dimension captures a qualitatively unique type of voluntary contribution to organizational life.

Although OCB has received less attention in the literature on cyberloafing than attitudinal outcomes like commitment, the conceptual relationship is theoretically coherent employees who engage in long-term cyberloafing are, by definition, diverting discretionary effort away from organizational goals, which reduces the significant voluntary contributions that OCB captures (Askew et al., 2014; Andreassen et al., 2014). Therefore, a more comprehensive understanding of how internet-based workplace deviance manifests into attitudinal and behavioral disengagement is provided by the combined analysis of cyberloafing, OC, and OCB within an integrated analytical framework.

LITERATURE REVIEW

Conceptual Evolution and Research Growth of Cyberloafing

The concept of cyberloafing was originally taken from Lim's (2002) work, which explains cyberloafing as the intentional use of company internet access for personal purposes during work hours. Few could have predicted how important this concept would become to the study of organizational behavior in the ensuing twenty years. What started out as a fairly simple observation that workers were utilizing office computers for purposes unrelated to their jobs quickly turned out to be a far more complicated phenomenon. Early researchers made a helpful distinction between more serious forms of cyberloafing, like accessing gambling websites, streaming movies, or downloading software at the expense of the company, and less serious forms, like reading the news online or checking a personal email (Lim, 2002; Batabyal & Bhal, 2020). The situation became even more complex when smartphones proliferated in the workplace. Cyberloafing was no longer restricted to the office desktop it could occur at any time, anywhere, and on any device. Among those who took this seriously were Batabyal and Bhal (2020), who looked at how personal mobile-internet loafing and mobile cyberloafing function in accordance with their own internal ethical logics, different from more conventional forms of the activity. The situation became even more complex when smartphones proliferated in the workplace. Cyberloafing was no longer restricted to the office desktop it could occur at anytime, anywhere, and on any device. Among those who took this seriously were Batabyal and Bhal (2020), who looked at how personal mobile-internet loafing and mobile cyberloafing function in accordance with their own internal ethical logics, different from more conventional forms of the activity.

It became clear by the early 2020s that the field needed to be evaluated systematically. In a significant review that summarized decades of research, Lim and Teo (2022) pointed out that although a lot had been discovered about who cyberloafs and why, the field remained theoretically scattered and had not given enough consideration to the possibility that cyberloafing might occasionally serve acceptable psychological functions. Further, Tandon et al. (2022) conducted a comprehensive analysis of 87 peer-reviewed articles and discovered significant gaps in the conceptualization and study of the construct in many situations. However, neither review was able to describe the field's intellectual structure, including the main authors and journals, citation patterns, knowledge clusters, and thematic fault lines that have influenced the way this research community thinks. This study aims to fill that exact gap.

Cyberloafing and Organizational Commitment

Among all the outcome of organizations that scholars linked with cyberloafing, organizational commitment has the most obvious theoretical connection. Simply, an employee is less likely to spend work hours on social media or online shopping if they actually feel a connection to their company, care about its objectives, and view themselves as part of its future. What makes this literature interesting is not just the way of relationship but its complexity. Instead of focusing on whether cyberloafing and commitment are related, researchers are instead investigating how and by what processes. Cyberloafing can function as a mediating variable between workload and organizational commitment as demonstrated by Aladwan et al. (2021). Employees who are overburdened by

excessive demands turn to the internet as a coping mechanism which eventually weakens their attachment to the organization.

Additionally, the correlation between cyberloafing and commitment is inverse. According to Lim et al. (2021), employees reactions to abusive supervision are moderated by organizational commitment like those with higher commitment are more resilient to the effects of a mistreating boss that cause cyberloafing as if their attachment to the company acts as a kind of buffer. This picture is further enhanced by recent research on HRM practices. Lai et al. (2025) proved that socially conscious HR policies minimize cyberloafing in part by boosting corporate commitment which in turn increases employees sense of responsibility to conduct appropriately online. This reasoning was extended to work-related social media use by Olfat et al. (2023), who discovered that dedicated workers are more likely to utilize online networks constructively and that this link is partially explained by their higher tendency for constructive voice. All of these researches paint the same picture that corporate commitment is an active factor that influences how employees interact with cyberloafing in the first place rather than a passive downstream effect. The research is still mostly cross-sectional, geographically focused and theoretically limited despite this expanding body of evidence this situation has not yet been methodically recorded or addressed.

Cyberloafing and Organizational Citizenship Behaviour

If cyberloafing and organizational commitment are connected but conceptually different then organizational citizenship behaviour is in stark contrast to cyberloafing. OCB records the voluntary, discretionary contributions workers make above and beyond the requirements of their jobs such as helping a struggling coworker, taking the initiative to complete a task that no one requested them to do, or contributing positively at a team meeting (Organ, 1988; Podsakoff et al., 2000). Cyberloafing by contrast, represents the voluntary withdrawal of time and energy away from the organization. The two constructs are not just contrasting in degree but they also pull in fundamentally distinct directions and this theoretical tension makes their simultaneous analysis valuable. This contradiction is well-supported by the actual data. Mahdiuon and Fattahi (2024) discovered that among Iranian university employees, cyberloafing decreased job performance while OCB increased it. In fact, OCB had a stronger effect than cyberloafing. This finding raises significant questions regarding the relative influence of positive voluntary conduct over negative deviant behavior at workplace.

On the OCB side the monitoring literature is especially helpful. According to Jiang et al. (2024), cyberloafing decreases in the short term when firms use internet monitoring but OCB decreases simultaneously and continues to decline even after cyberloafing has stabilized. This conclusion raises concerns for practitioners since it implies that overbearing management tactics might hinder the same discretionary behaviors that most businesses rely on and find difficult to enforce. A recurring theme in the larger OCB study is that commitment-related mechanisms are nearly always at the center even outside of the cyberloafing literature. Quality of work life increases OCB through psychological well-being and decreased role stress (Dewangan & Goswami, 2025) responsible leadership increases OCB through organizational identification and gratitude (Luo et al., 2025) and leaders knowledge-hiding behavior lowers work engagement with OCB performing as a facilitator that compensates in part for this harm (Al Hawamdeh & Al Hawamdeh, 2025).

It has been discovered that HRM approaches improve OCB by influencing employee commitment and attitudes. Taamneh et al. (2018) demonstrated the strategic importance of encouraging discretionary employee contributions by confirming that OCB mediates the association between HRM practices and organisational success. By highlighting the mutual dependence of leadership, commitment, and citizenship behaviour in organizational systems, transformational leadership similarly indirectly increases OCB through work satisfaction and organisational commitment as dual mediators (Aulia et al., 2023). Pradhan et al. (2016) showed that work-life balance enhances OCB through organisational commitment's mediating function, demonstrating once more that commitment is a crucial factor positioned between organizational conditions and citizenship outcomes. When considering these results collectively, they show that the OC and OCB relationship is a theoretically rich domain that significantly overlaps with cyberloafing yet, this three-way intersection has not been mapped as a cohesive body of literature. Pradhan et al. (2016) showed that work-life balance enhances OCB through organizational commitment's mediating function, demonstrating once more that commitment is a crucial factor positioned between organizational conditions and citizenship outcomes. When considered collectively, these results show that the OC and OCB relationship is a theoretically rich domain that significantly overlaps with cyberloafing, yet this three-way intersection has not been mapped as a cohesive body of literature.

RESEARCH GAP AND RATIONALE FOR BIBLIOMETRIC ANALYSIS

When you look at these three areas of study a few things stand out. One thing is that there is a lot of written work on OCB commitment and cyberloafing. These are all known areas that people have been studying for decades. Another thing that stands out is that all this work is not very well connected. There are different ideas and theories such as Social Exchange Theory, Conservation of Resources Theory The Theory of Planned Behaviour and Self-Determination Theory, that are used to study OCB organizational commitment and cyberloafing. You can find

these studies in different kinds of journals, including management, information systems, psychology and education journals. People have done these studies in different countries.

What is surprising is that no one has ever put all this information together in one place to ask some questions. For example what does all this work look like when you put it together? Which researchers have had the influence, on OCB organizational commitment and cyberloafing? Which ideas have helped us understand these areas the most? Where are the gaps that future researchers should try to fill in?

Additionally, the geographic image is not uniform. Southeast Asia, the Middle East, and Turkey account for the majority of empirical research on cyberloafing and its organizational effects whereas South Asia, Africa, Latin America, and many other locations are still largely left out of the discussion. This is important because cyberloafing is not culturally neutral internet use at work is shaped by organizational contexts, customs and expectations that differ greatly across societies and a literature dominated by a few geographic contexts can only tell half of the story. In a similar vein the methodological profile of the field has never been systematically documented. As a result, researchers lack a clear map of the areas where the field has been methodologically strong and weak, such as how many studies use cross-sectional surveys versus longitudinal designs and how many rely on self-reports versus behavioral measures, and how many are quantitative versus qualitative (Ansari & Khan, 2020; Farooq & Maqbool, 2024).

All of these deficiencies can be filled simultaneously with bibliometric analysis. In contrast to narrative reviews, bibliometric methods can reveal the intellectual structure of a research field by tracking publication trends, examining citation networks, mapping keyword co-occurrence patterns, and identifying authorship and institutional collaboration structures (Donthu et al., 2021). Using these techniques, this study examines the literature from 2001 to 2025 that resides at the framework of cyberloafing, organizational commitment, and organizational citizenship behavior. The objective is to provide an organized, evidence-based picture of how this body of knowledge has developed and where it is concentrated and where the most fruitful opportunities for future research lie, rather than to replace the kind of thorough theoretical synthesis that previous reviews have provided (Khan et al., 2023; Zehra et al., 2024; Ansari, 2020)

METHODOLOGY

The purpose of this paper is to map the bibliometric structure of the cyberloafing literature over the last 23 years. Bibliometric evaluations generally constitute performance analyses to measure the contributions of different actors to a scientific field and science mapping analyses that illustrate how a field's constituents are related to each other (Cobo et al., 2011). Bibliometrics enable the quantitative analysis of large amounts of literature, uncovering patterns of growth, influence and thematic development not captured by narrative reviews (Donthu, Kumar, Mukherjee, Pandey, & Lim, 2021). In Scopus, we searched the title, abstract, and keywords fields using a keyword search string based on the term cyberloafing and known synonyms (e.g., "cyber loafing," "personal internet use at work," "non-work related internet use at work"), for publications from 2001 onwards (when cyberloafing was first formally defined in the organizational behaviour literature). From our search results we first removed duplicate records. We included synonyms and variations in the search string to capture early literature that may have used pre-standardized terminology as well as recent literature on the topic (retrieved June 2026).

This study conducted a systematic literature review. The initial search returned 469 records. After screening against the inclusion criteria for English-language peer-reviewed literature published between 2001 and 2025, a final set of 349 articles was retained, including 338 original research studies and 11 reviews. We used VOSviewer version 1.6.20 to do all the science mapping analyses. VOSviewer is a software that Leiden University developed. It is free to use. Two people, Van Eck and Waltman made VOSviewer in 2010. We did four analyses with VOSviewer. First, we looked at what keywords the authors used. We only looked at keywords that were used at three times. Then we did a co-citation analysis to find out what other papers were cited. It considered papers that were cited at fifteen times. We also did a bibliographic coupling analysis. This means we looked at what papers cited the other papers. We only looked at papers that had been cited at once.. We did an author co-authorship analysis. This means we looked at who wrote papers. We only looked at authors who had written at two papers together. We also did a performance analysis. This included looking at how many papers were published each year how papers each author wrote, what journals the papers were published in and where the authors were, from. We got all this information from a file we exported from Scopus.

RESULTS

Publication Trend Analysis

Among 349 papers that are being studied there are 11 review articles and 338 original research publications published in English between 2002 and 2025, which was obtained from the Scopus database. With the average 31.3 citations per document and 10,907 citations overall, the corpus presents a well-cited body of literature for a specialized organizational behavior issue. Although the rate of growth has been increased in recent years, the annual publishing trend shows a unique and consistent rate of growth during the study period. The first publication

of corpus which corresponds to Lim's fundamental idea of cyberloafing, was actually published in 2002. It takes a long time of slow and irregular growth throughout the 2000s. The field's early and experimental nature is showed in the fact that annual output occasionally surpassed six papers between 2002 and 2014. Around 2015, the output reached 11 papers annually, marking the start of a mild development phase. In 2017 and 2018, the output increased to 16–17 papers annually. After a decline of 11 papers in 2019, there was a dramatic increase in publication activity, with 16 papers in 2020, 26 in 2021, 26 in 2022, 50 in 2023, 53 in 2024, and a peak of 79 papers in 2025. With 2025 alone accounting for almost 22.6% of all publications in the whole 23-year corpus, this exponential growth pattern in the last three years suggests that cyberloafing research is presently going through its most productive phase.

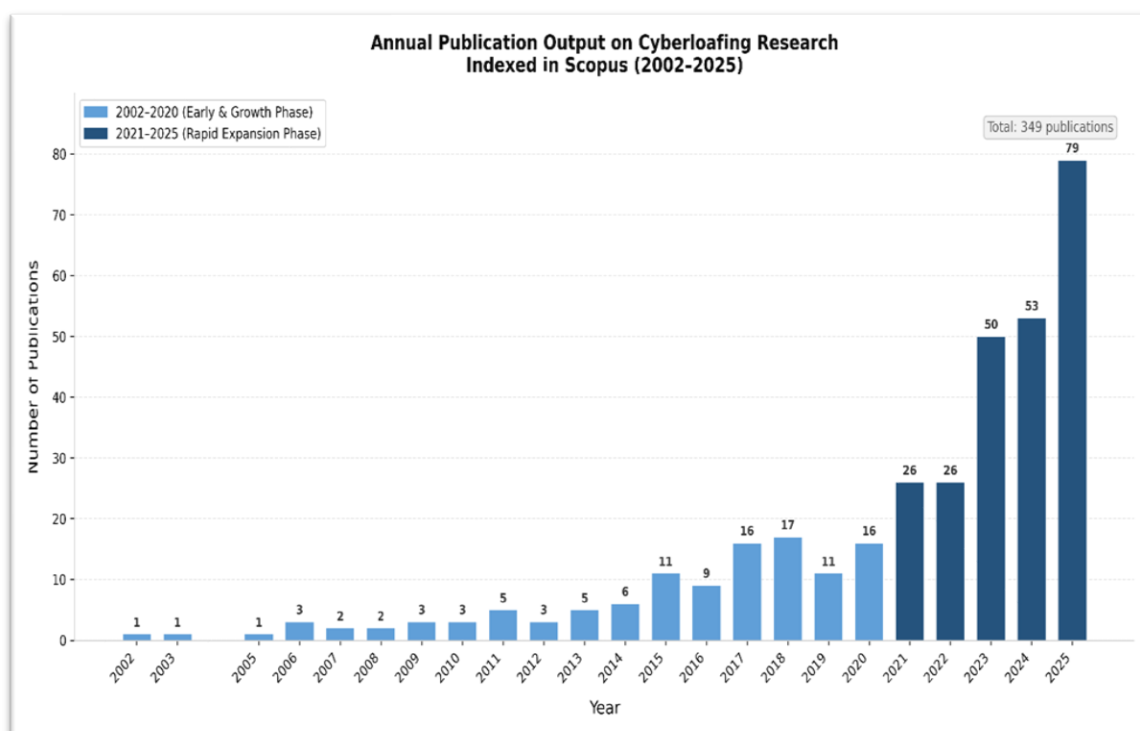


Figure 1. Annual publication output on cyberloafing research indexed in Scopus (2002–2025).
Most Productive Authors

Ten academics have made the most significant contributions to the literature on cyberloafing, according to the analysis of author productivity across the 349-paper corpus. Koay K.Y. leads With 12 publications and Lim V.K.G. with 10. This is noteworthy because Lim's 2002 work has the most citations in the whole corpus, presenting his dual role as the inventor and one of the most active modern contributors. Zoghbi-Manrique-de-Lara P. And Zhang Y. Wrote 8 things that got published. They both did a lot of work. Wu J. Was also very productive. Got 7 things published. Ugrin J.C., Liu L. And Soh P.C.-H. Each wrote 6 papers that people read. Zhang J. and Li Y. also did a job and each got 5 papers published. It is interesting to see that scholars from Asia and Spain are doing well. Zoghbi-Manrique-de-Lara P. And other Asian and Spanish scholars like Zhang, Y., are at the top. This makes sense when you look at where all the scholars are from, which we talk about next.

Most Productive Journals

The 349 papers were spread out across a lot of journals. Computers in Human Behavior had the papers with 20. This shows that the field of study is connected to two areas: how organizations behave and how information systems work. Internet Research and Current Psychology each had 12 papers. Behaviour and Information Technology had 11 papers. Education and Information Technologies and Frontiers in Psychology each had 8 papers. Behavioral Sciences had 7 papers. Journal of Business Ethics, Journal of Managerial Psychology and Information Technology and People each had 5 or 6 papers. This shows that research on cyberloafing is done in areas, including management, psychology, information systems and education. No one journal has all the papers on cyberloafing. This is like what we saw when we looked at the keywords and how they are related to each other. Cyberloafing research is done in areas, including management, psychology, information systems and education. The field of cyberloafing is connected to journals, including Computers in Human Behavior Internet Research

and Current Psychology and it is studied in many disciplines, including management, psychology, information systems and education and cyberloafing is an important topic, in all these areas.

Geographic Distribution

Geographic analysis of author affiliations showed that China produced the papers with 89. The United States came second with 65 papers and Turkey was third with 58 papers. India contributed 29 papers and Malaysia 26. Spain had 19 papers. Pakistan and Indonesia each had 18 papers. The United Kingdom had 16 papers. Iran had 13. This distribution shows that cyberloafing research comes from Asia and the Middle East. China, Turkey, India, Malaysia, Pakistan and Indonesia together account for most of the output on cyberloafing. Cyberloafing research is a deal in Turkey and has been for almost 20 years. India and Pakistan are starting to contribute more to cyberloafing research. They still do not contribute as much as they should given their large workforces. There is a gap in cyberloafing research, from Africa, Latin America and Eastern Europe. These regions are not well represented in the literature on cyberloafing.

Most Cited Papers

The cyberloafing field is built on the ideas of the ten cited papers. The paper by Lim from 2002 called "The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice" is the important one with 699 citations. This is than twice as many as the second most cited paper. This shows that Lims paper is the foundation of the cyberloafing field. The paper by Gökçearslan and others from 2016 is the most cited with 317 citations. They studied how people get addicted to their smartphones and how they control themselves. This paper is important because it shows how the cyberloafing field is expanding to include phones and education. The third cited paper is by Blanchard and Henle from 2008 with 304 citations. They looked at the types of cyberloafing and what causes them. Their paper is still one of the referenced papers on the types of cyberloafing. Lim and Chens paper from 2012 has 269 citations. They studied whether cyberloafing helps or hurts work performance. Wagner and others paper from 2012 has 241 citations. They did a study that showed how lack of sleep is connected to cyberloafing. Lim and Teos paper from 2005 has 212 citations. They did one of the studies on how common cyberloafing is and how it is controlled. The rest of the ten papers are by Moor and Anderson from 2019 Liberman and others from 2011 Andreassen and others from 2014 and Askew and others from 2014. They have between 159 and 185 citations each. These ten papers have a lot of citations. A total of 10,907 citations. This shows that the cyberloafing field is following a pattern of how research fields grow. The cyberloafing field is built on these papers. They are very important for understanding cyberloafing.

Keyword Co-occurrence Analysis

The cyberloafing keyword map shows how different ideas are connected. It was made by looking at what authors said and including words that came up at least three times. This map is like a web with cyberloafing right in the middle. There are eight groups of ideas that come out from the center. The first group is the biggest. It has words like cyberslacking, internet and workplace deviance. This group is about why people cyberloaf and what kind of person does it. It is the most developed area of study in the field of cyberloafing. The second group has words like supervision, emotional exhaustion and job stress. This group is about how stress and not having resources can make people cyberloaf. It is based on a theory by Hobfoll that says people try to keep the resources they have. The third group is up and to the right on the map. It has words like stress, creativity and technology. This group is about how different contexts and cultures can affect cyberloafing. For example it looks at how healthcare workers and people in Chinese workplaces cyberloaf. The fourth group connects cyberloafing to addiction. It has words like smartphone addiction and internet addiction. This group is about why people get addicted to the internet and how that affects their behavior at work. The fifth group is about how researchers study cyberloafing. It has words like PLS-SEM, COVID-19 and university students. This group shows that most researchers use a method called PLS-SEM and that many studies are done in Malaysia. The sixth group is about how organizations can affect cyberloafing. It has words like workplace, justice and social media. This group is about how fair or unfair people think their workplace is and how that affects their behavior. There are two groups. The seventh group is about how much people like their job and the eighth group's about feeling overqualified and trying to make work more meaningful. What is important to note is that cyberloafing research does not often look at how committed people're to their organization or how much they do extra to help their organization. This is a gap, in the research that this study wants to fill. The cyberloafing keyword map helps us see this gap and understand the cyberloafing literature better.

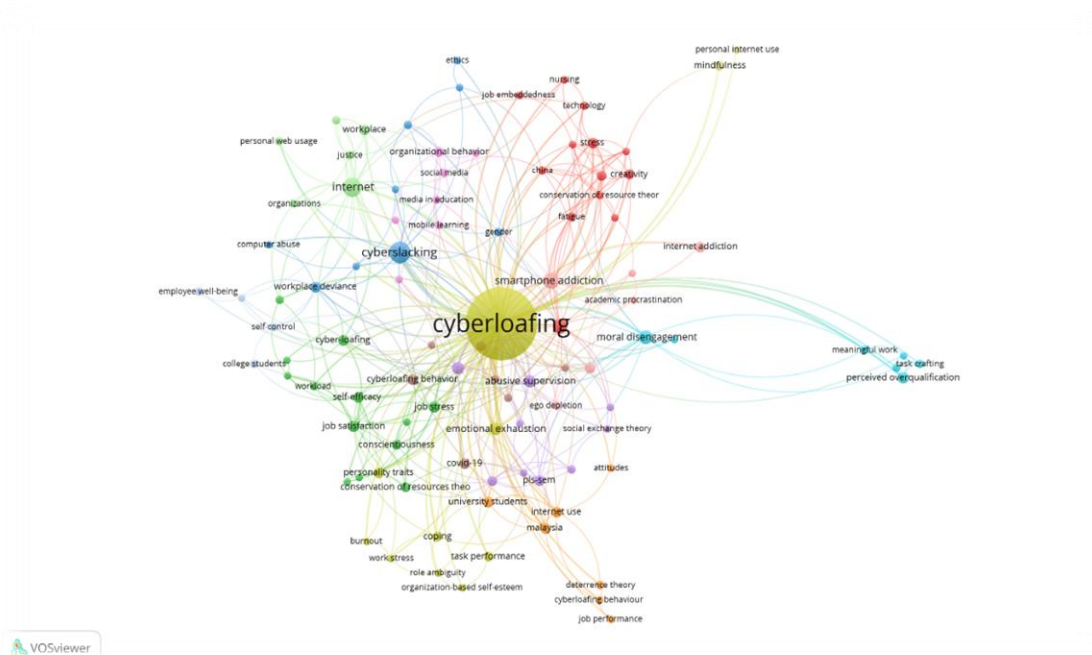


Figure 2. Keyword co-occurrence map of cyberloafing literature (2001–2025). Node size indicates frequency of occurrence; line thickness indicates strength of co-occurrence.

Co-citation Analysis

The analysis of the cyberloafing literature was done with a co-citation threshold of 15. This analysis found 355 cocited references that formed three distinct groups. These groups represent the ideas of the cyberloafing literature. The first group is coloured with red. It has Zoghbi-Manrique-de-Lara as the main reference. This group also includes Spector, Koay, Chong, Teo, Dhir, Luo, Kacprzak, Sun and Yang. The cyberloafing literature in this group is about how people feel about fairness at work how they are supervised and how they behave at work. This group shows that peoples feelings about fairness, supervision and bad behavior at work are one of the ideas of the cyberloafing literature. There are also papers by Sarstedt and Larcker in this group, which shows that the method used in this group is based on statistics.

The second group is coloured green. It has Henle and Coovet as the main references. This group also includes Lim, Chen, Teo, Block, Karau, Dursun, Karademir, Sahin, Weatherbee, Blanchard, Toker, Siponen and Cevik. The cyberloafing literature in this group is about how to measure cyberloafing, how common it is and how it is related to technology addiction. This group shows that the development of scales to measure cyberloafing, how to measure it in life and how cyberloafing is connected to smartphone and internet addiction are a major part of the cyberloafing literature.

The third group is coloured blue. It has Lims 2002 paper as the main reference. This group also includes Spector, Buffardi, Chen, Teo, Ferris, Ward-Cook, Bercovich, Larose and Sheikh. The cyberloafing literature in this group is about the ideas of cyberloafing and how people feel about their jobs. This group shows that the original ideas of cyberloafing are based on how people justify their behavior, fairness at work and how people feel about their jobs. Sheikhs paper in this group connects the ideas of cyberloafing to how people behave at work. The important finding from this analysis is that Lims 2002 paper is important in all three groups. This shows that Lims 2002 paper is the foundation of the cyberloafing literature and it is referenced by every study, in the field no matter what method or approach is used. The cyberloafing literature and Lims 2002 paper are connected in ways. The cyberloafing literature is based on Lims 2002 paper. .

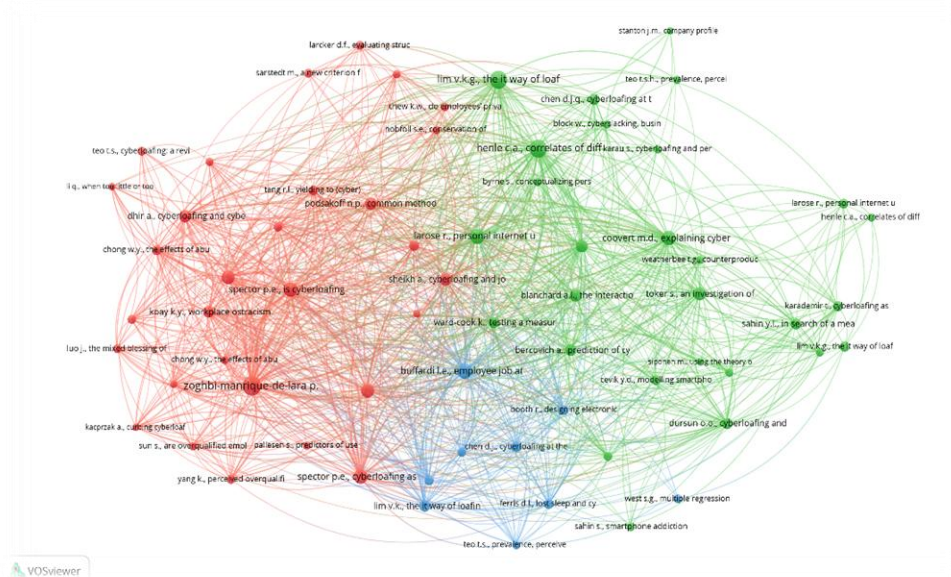


Figure 3. Co-citation analysis map of cited references in cyberloafing literature. Node size indicates citation frequency; clusters represent distinct intellectual traditions.

Bibliographic Coupling Analysis

The analysis of papers, which looks at the references that are shared by papers to find out what people are thinking about now found a network of 308 papers that can be divided into five groups.

The first group, which is coloured green has a lot of papers by people like Lim from 2002 Blanchard from 2008 Lim again from 2012 Wagner from 2012 Manrique de Lara from 2006 Zoghbi-Manrique-de-Lara from 2017 and 2020 Kim from 2011, 2017 and 2018 Aghaz from 2016 Khansa from 2017 Pindek from 2018 Mercado from 2017 Ugrin from 2013 and Page from 2015. This group of cyberloafing research is from around 2002 to 2018. It is like the foundation of the whole field. It has papers that came up with the ideas figured out how to measure things and did the tests.

The second group, which is coloured red has papers by people like Tandon from 2022 and Lim from 2024. It also has papers by Andel from 2019 and 2022 Khan from 2023 Wu from 2020 Koay from 2023 Usman from 2021 Jiang from 2020 Zhang from 2023, 2024 and 2025 Henle from 2024 Liu from 2023 Zhou from 2022 Tan from 2023 Yu from 2024 Zhao from 2025 Dhali from 2023 Gupta from 2025 and Agrawal from 2025. This group of cyberloafing research is from 2019 to 2025. It is like the new frontier. It has reviews of what people have found out ideas like working from home and what happens after a pandemic and it is where the field is growing the most.

The third group, which is coloured blue has papers by people like Gökçearslan from 2016 and Moor from 2019. It also has papers by Cheng from 2020 Ng from 2016 Toker from 2021 Soh from 2018 Wu from 2018 Kian-Yeik from 2018 Şahin from 2021 Fu from 2021 Sevinç from 2022 Khalifeh from 2024 Shaddiq from 2021 Mihelič from 2023 Chakraborty from 2024 Krishna from 2023 Karabıyık from 2021 Korzynski from 2024 and Sarfraz from 2024. This group of cyberloafing research looks at what happens in schools and universities and how it is connected to addiction to smartphones using the internet on your phone and being able to control yourself.

The fourth group, which is coloured yellow-orange has papers by people like Koay from 2017. It also has papers by Agarwal from 2020 Varghese from 2017 Lim from 2021 Zhang from 2015 Ögüt from 2013 and Hense from 2020. This group of cyberloafing research looks at what happens in organizations like how bosses behave if things are fair and how people get along at work. The fifth group looks at personality being able to control yourself and how people are different with papers by people like Paulsen from 2015 Billari from 2018 and J.-Ho from 2017. If you look at the groups you can see that there is a difference between the old group, which is coloured green and has papers from 2002 to 2018 and the new group, which is coloured red and has papers from 2019, to 2025. This shows that the field of cyberloafing research is changing and growing.

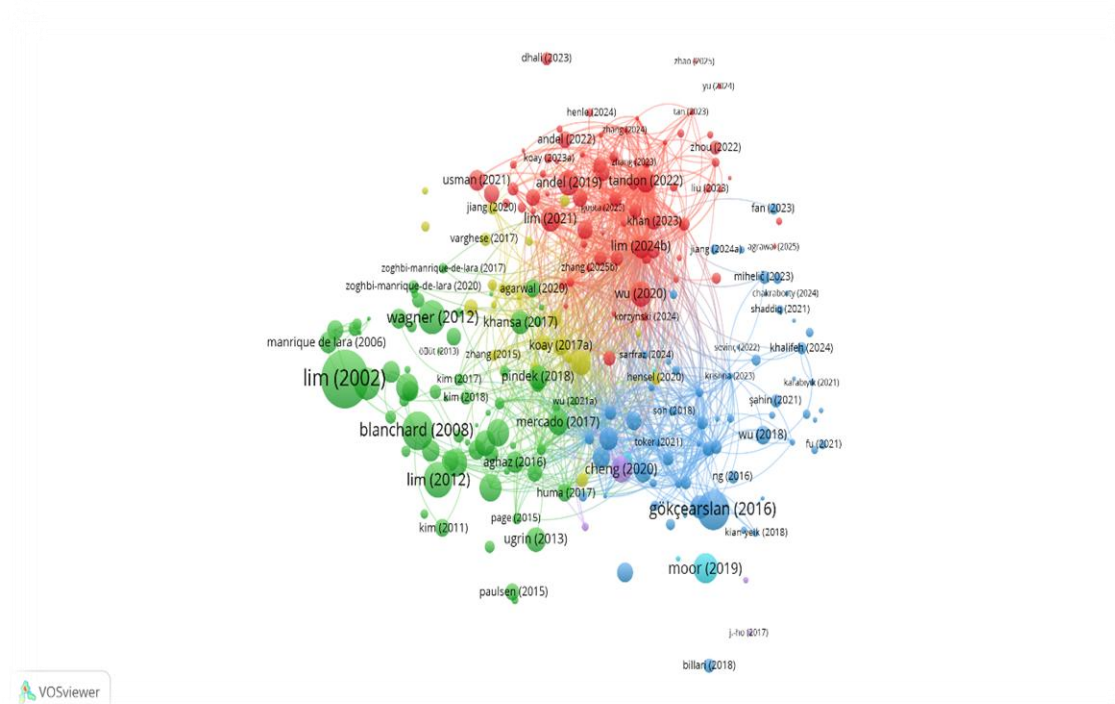


Figure 4. Bibliographic coupling map of cyberloafing documents (2001–2025). Node size indicates coupling strength; clusters represent contemporary research communities.

Author Co-authorship Analysis

The author looked at who co-writes with whom. Found 114 authors who have written at least two documents together. Of these 17 authors formed the group spread across four clusters with 50 connections and a total strength of 83.

The first cluster shown in red is led by Wu Jinnan, who's the biggest node. Wu Jinnan works with Liu Lin, Wang Fang, Mei Wenjuan, Farivar Farveh and Ugrin Joseph. This group is mostly Chinese. Also works with people from other countries. The second cluster, shown in yellow is made up of two people: Zoghbi-Manrique-de-Lara Pablo and Viera-Armas Mercedes. They are from Spain. Have written a lot about organizational justice and cyberloafing. Their work is very well-known in the field. The third cluster, shown in blue includes Guo Shanshan, Zhang Wenpei and Song Mengmeng. This group is also Chinese and likely works at the university. The fourth cluster shown in green has Jiang Hemin, Tsohouridi Aggeliki, Siponen Mikko, Khansa Lara and Kuem Jungwon. This group is the international with people from Finland, America and the Middle East. They focus on information systems and deterrence theory related to cyberloafing. There are three findings:-

First the group of authors who write together is not very connected. Is spread out geographically. There are four clusters but no one author is at the center connecting everyone else. This suggests that the field does not have an international group of authors working together.

Second Zoghbi-Manrique-de-Lara is the influential author. He appears prominently in both the co-citation map and the co-authorship map.

Third Chinese authors are becoming more dominant. Two of the four clusters are made up of authors and the cluster led by Wu Jinnan is the most connected. This is consistent with the fact that there has been a surge, in Chinese publications as shown in the bibliographic coupling analysis.

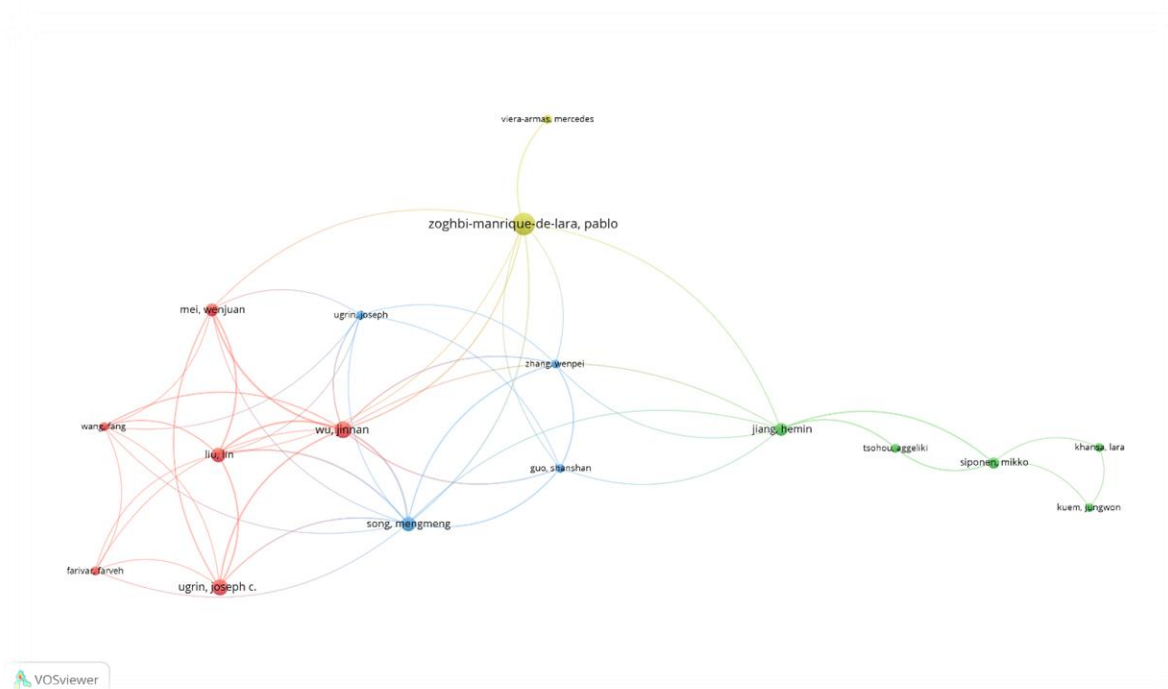


Figure 5. Author co-authorship network in cyberloafing literature (2001–2025). Node size indicates number of publications; line thickness indicates strength of collaboration.

DISCUSSION AND CONCLUSION

This study looked at the structure of cyberloafing research over twenty-three years. It paid attention to how the literature talked about organizational commitment and organizational citizenship behaviour. The study used a group of 349 publications. Did four different analyses. It also did a performance analysis. This gave a picture of how the field of cyberloafing research has grown. It showed where the field is focused and where it is lacking. The trend of publications tells a story. Cyberloafing research started as an area of study in the early 2000s. Now it is one of the growing areas of organizational behaviour research in the mid-2020s. The number of publications grew fast in the last three years of the study. In 2025 there were 79 publications. This shows that the field of cyberloafing research is really moving forward. The COVID-19 pandemic also played a role. It made organizations and researchers think about how people use the internet when they work from home or, in environments. This means that cyberloafing research is not slowing down. It is actually entering a phase where it will be more productive and theoretically ambitious. Cyberloafing research is still a growing field and cyberloafing research will continue to be an area of study. The science mapping analyses show that this field is really interesting but not fully developed. Social Exchange Theory and Conservation of Resources Theory are the ideas that people use to understand this field. There are three areas that people study. Organizational justice and deviance measurement and technology addiction and foundational theory and job attitudes. These areas cover most of what people have learned about this field far. At the time the keyword co-occurrence map shows what this field is missing. Organizational commitment and organizational citizenship behaviour are not topics in cyberloafing research even though they are crucial to understanding how internet-based workplace deviance affects the whole organization. This is the important thing that this study found and it means that people need to do more research on this topic. The study also looked at where the research's coming from and who is working together. Most of the research is coming from China, the United States, Turkey, India and Malaysia. This shows that these countries have a lot of scholars who are studying this field. It also shows that there are some big gaps. Hardly any research is coming from Africa, Latin America or Eastern Europe. The people who are doing this research are not working together much and this is why the field is not developing as quickly as it could be. If scholars, from countries and regions worked together more it would probably help the field to grow and become more diverse. This study does three things. First it creates a map of the cyberloafing literature that focuses on commitment and organizational citizenship behavior which shows that these topics are not well covered and need more work. This study also shows how to use methods to get a complete picture of a field of study. Lastly it helps researchers, students and human resources people understand the cyberloafing literature by identifying the important works, the main ideas, the best places to publish and the areas that need more research.

Future studies should look at how cyberloafing affects organizations over time and how organizational commitment and organizational citizenship behavior are related. We also need studies in different parts of the

world. The education sector is especially important because we do not know much about how cyberloafing affects universities and colleges. This study is the beginning and it should help guide the next generation of cyberloafing research. The cyberloafing literature needs work and this study provides a starting point, for that work.

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Competing Interest

The authors have no competing interests to declare that are relevant to the contents of this article.

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