



The Role of Self-Control on Cyberloafing Behavior of Civil Servants in Nagan Raya District

Peran Pengendalian Diri Terhadap Perilaku Cyberloafing Pegawai Negeri Sipil di Kabupaten Nagan Raya

Sarah Khairunnisa¹, Hamdi Harmen², Muhammad Rahmat Hidayat³, Ivon Jalil⁴, Rusdi⁵

Universitas Teuku Umar

Email: sarahnisa0303@gmail.com

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Abstrak

Studi ini meneliti pengaruh kontrol perilaku, kontrol kognitif, dan kontrol pengambilan keputusan terhadap perilaku cyberloafing di kalangan Pegawai Negeri Sipil (PNS) di Kabupaten Nagan Raya, Indonesia. Meskipun penelitian sebelumnya telah menyelidiki hubungan antara pengendalian diri dan cyberloafing, penelitian yang secara khusus meneliti peran kontrol perilaku, kontrol kognitif, dan kontrol pengambilan keputusan sebagai dimensi utama pengendalian diri di sektor publik masih terbatas. Penelitian ini menggunakan pendekatan penjelasan kuantitatif dengan menggunakan Structural Equation Modeling–Partial Least Squares (SEM-PLS). Studi ini melibatkan 169 PNS dari beberapa instansi pemerintah di Kabupaten Nagan Raya, dengan data dikumpulkan melalui distribusi kuesioner. Hasil penelitian menunjukkan bahwa kontrol perilaku, kontrol kognitif, dan kontrol pengambilan keputusan masing-masing memiliki pengaruh negatif yang signifikan terhadap perilaku cyberloafing. Di antara ketiga dimensi tersebut, kontrol pengambilan keputusan menunjukkan pengaruh terkuat dalam mengurangi perilaku cyberloafing. Lebih lanjut, model struktural menjelaskan 73,8% varians dalam perilaku cyberloafing, menunjukkan bahwa dimensi pengendalian diri memainkan peran substansial dalam meminimalkan penggunaan internet yang tidak terkait pekerjaan oleh karyawan selama jam kerja. Temuan ini mendukung Teori Regulasi Diri dengan mengkonfirmasi bahwa pengendalian diri yang lebih kuat memungkinkan individu untuk mengatur perilaku mereka, mempertahankan fokus kerja, dan menghindari perilaku kerja kontraproduktif seperti cyberloafing. Secara praktis, studi ini menyoroti pentingnya memperkuat pengendalian diri karyawan melalui kebijakan organisasi, pengembangan disiplin, dan pelatihan regulasi diri untuk meningkatkan produktivitas kerja dan kinerja pelayanan publik.

Kata kunci: Pengendalian Perilaku, Pengendalian Kognitif, Pengendalian Pengambilan Keputusan

Abstract

This study examines the effect of behavioral control, cognitive control, and decisional control on cyberloafing behavior among Civil Servants (PNS) in Nagan Raya Regency, Indonesia. Although previous studies have investigated the relationship between self-control and cyberloafing, limited research has specifically examined the roles of behavioral control, cognitive control, and decisional control as the primary dimensions of self-control within the public sector. This research employs a quantitative explanatory approach using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The study involved 169 Civil Servants from several government agencies in Nagan Raya Regency, with data collected through questionnaire distribution. The results indicate that behavioral control, cognitive control, and decisional control each have a significant negative effect on cyberloafing behavior. Among the three dimensions, decisional control demonstrates the strongest influence in reducing cyberloafing behavior.



Furthermore, the structural model explains 73.8% of the variance in cyberloafing behavior, indicating that self-control dimensions play a substantial role in minimizing employees' non-work-related internet use during working hours. The findings support the Self-Regulation Theory by confirming that stronger self-control enables individuals to regulate their behavior, maintain work focus, and avoid counterproductive work behaviors such as cyberloafing. Practically, this study highlights the importance of strengthening employees' self-control through organizational policies, discipline development, and self-regulation training to improve work productivity and public service performance.

Keywords: Behavioral Control, Cognitive Control, Decisional Control

INTRODUCTION

The rapid advancement of information and communication technology has transformed the modern workplace by providing employees with easy access to the internet to support communication, information sharing, and work efficiency. Despite its benefits, internet accessibility has also introduced new organizational challenges, one of which is cyberloafing behavior. Cyberloafing refers to employees' use of organizational internet facilities for personal purposes during working hours, such as browsing social media, online shopping, watching entertainment content, or engaging in other non-work-related online activities. This behavior has become a growing concern because it reduces employee productivity, increases work distraction, and negatively affects organizational performance.

Cyberloafing has become a global phenomenon across both private and public organizations. Previous studies reported that approximately 89% of employees in the United States admitted spending part of their working hours on personal internet activities, while studies in China and Australia also revealed high levels of cyberloafing associated with workplace pressure, organizational climate, and internet accessibility. In Indonesia, cyberloafing has similarly emerged as an important organizational issue, with more than half of surveyed employees acknowledging that they engage in non-work-related internet activities during office hours. These findings indicate that cyberloafing is no longer an isolated individual behavior but has become an organizational challenge requiring effective managerial attention.

Among various antecedents of cyberloafing, self-control has been widely recognized as one of the most influential psychological factors. Individuals with high self-control are generally more capable of regulating their emotions, thoughts, and behaviors, allowing them to prioritize work responsibilities over personal interests. Conversely, employees with low self-control are more likely to experience difficulties resisting online distractions, resulting in higher tendencies to engage in cyberloafing. Based on the Self-Regulation Theory, individuals continuously monitor and regulate their behavior to achieve predetermined goals. Therefore, stronger self-control enables employees to suppress impulsive behavior and maintain focus on work-related tasks.

Self-control consists of several dimensions that contribute differently to behavioral regulation, including behavioral control, cognitive control, and decisional control. Behavioral control refers to an individual's ability to regulate observable actions according to organizational rules and expected behaviors. Cognitive control reflects the ability to manage attention, process information, and maintain concentration despite distractions. Meanwhile, decisional control refers to an individual's capacity to make rational decisions by considering the consequences of



alternative actions before engaging in particular behaviors. These three dimensions are expected to reduce employees' tendency to perform cyberloafing during working hours.

Although numerous studies have investigated the relationship between self-control and cyberloafing, most previous research has treated self-control as a single construct without examining the distinct contribution of its dimensions. Furthermore, empirical evidence focusing on Civil Servants (Pegawai Negeri Sipil/PNS) in Indonesian public institutions remains relatively limited, despite the strategic role of public employees in delivering effective public services. Understanding how behavioral control, cognitive control, and decisional control influence cyberloafing is therefore essential for developing strategies to improve employee discipline, productivity, and organizational effectiveness within government institutions.

Accordingly, this study aims to examine: (1) the effect of behavioral control on cyberloafing behavior; (2) the effect of cognitive control on cyberloafing behavior; and (3) the effect of decisional control on cyberloafing behavior among Civil Servants in Nagan Raya Regency, Indonesia

LITERATURE REVIEW

Behavioral Control

Behavioral control refers to an individual's ability to regulate and manage observable actions in accordance with organizational rules, social norms, and predetermined goals. As one of the primary dimensions of self-control, behavioral control reflects an individual's capacity to restrain impulsive behavior, maintain discipline, and consistently perform tasks that support organizational objectives. Employees with strong behavioral control are more capable of resisting temptations that may interfere with work responsibilities, including engaging in personal internet activities during working hours.

According to the Self-Regulation Theory proposed by Bandura (1986), individuals continuously monitor and regulate their behavior by comparing their actions with personal standards and organizational expectations. This self-monitoring process enables employees to evaluate whether their behavior is appropriate and make necessary adjustments to achieve desired outcomes. In the workplace, behavioral control plays an essential role in maintaining work discipline because employees are constantly exposed to various distractions resulting from technological advancement and unrestricted internet access.

Previous studies have consistently reported that employees possessing higher levels of behavioral control demonstrate greater compliance with organizational regulations and lower tendencies to engage in counterproductive work behaviors, including cyberloafing. Behavioral control enables individuals to remain committed to work responsibilities even when they have opportunities to access entertainment or social media during office hours. Therefore, strengthening behavioral control may contribute to improving employee productivity and organizational effectiveness. The indicators of behavioral control consist of regulated administration and stimulus modifiability.



Cognitive Control

Cognitive control refers to an individual's ability to regulate mental processes, including attention, concentration, information processing, and decision-making during task performance. Employees with effective cognitive control are able to maintain focus on work-related activities while filtering irrelevant information and resisting environmental distractions. This capability allows individuals to allocate their cognitive resources efficiently and perform their responsibilities more effectively.

Within the perspective of Self-Regulation Theory, cognitive control represents an important mechanism through which individuals evaluate information, anticipate potential consequences, and regulate their thoughts before engaging in particular behaviors. Employees who possess strong cognitive control are generally more capable of maintaining concentration despite the presence of digital distractions such as social media notifications, online entertainment, or personal communication through internet-based applications. Consequently, they are less likely to interrupt work activities for personal online purposes.

Several empirical studies have suggested that cognitive control is negatively associated with cyberloafing behavior. Individuals with better concentration and information-processing abilities tend to prioritize organizational goals rather than immediate personal gratification obtained from internet activities unrelated to work. Therefore, cognitive control functions as a protective factor that minimizes productivity loss caused by excessive personal internet use during working hours. The indicators of cognitive control include information processing and anticipating situations.

Decisional Control

Decisional control refers to an individual's ability to make rational and responsible decisions after carefully evaluating available alternatives and considering their possible consequences. This dimension emphasizes the individual's capacity to select actions that support long-term objectives instead of responding impulsively to immediate temptations. Employees with strong decisional control are generally capable of making work-related decisions that align with organizational values and professional responsibilities.

According to Self-Regulation Theory, decision-making is a continuous self-regulatory process involving self-evaluation, behavioral adjustment, and future planning. Individuals first assess available behavioral alternatives, predict their outcomes, and subsequently select the most appropriate course of action. In organizational settings, decisional control enables employees to resist engaging in cyberloafing because they recognize its negative consequences for work performance, productivity, and organizational reputation.

Previous research indicates that employees possessing higher decisional control demonstrate greater responsibility, stronger ethical judgment, and better work discipline than those with weaker decision-making abilities. They are less likely to engage in non-work-related internet activities because they prioritize professional obligations over temporary personal satisfaction. Consequently, decisional control is expected to contribute significantly to reducing cyberloafing behavior among employees. The indicators of decisional control include action selection and alternative evaluation.



Cyberloafing

Cyberloafing refers to employees' intentional use of the internet for personal purposes during working hours while organizational resources or working time are allocated for official duties. This behavior includes various activities unrelated to work, such as browsing social networking sites, online shopping, reading entertainment news, watching videos, playing online games, and sending personal emails. Although these activities may appear harmless, excessive cyberloafing can reduce employee concentration, lower productivity, increase work delays, and negatively affect organizational performance.

The increasing availability of internet facilities in the workplace has made cyberloafing one of the most frequently discussed forms of counterproductive work behavior. While internet technology enhances communication and work efficiency, it simultaneously creates opportunities for employees to divert their attention toward personal online activities. Public sector organizations are particularly vulnerable because reduced employee productivity directly affects the quality of public services delivered to society.

Previous empirical studies have demonstrated that cyberloafing is influenced by various individual and organizational factors, including self-control, organizational climate, workload, internet accessibility, and supervisory practices. Among these factors, self-control has consistently been identified as one of the strongest predictors of cyberloafing behavior because individuals with higher self-regulation are more capable of controlling impulsive internet use and maintaining work focus. In this study, cyberloafing is measured using two indicators, namely activity browsing and activity emailing.

METHODS

This study employed a quantitative research approach with an explanatory research design to examine the influence of behavioral control, cognitive control, and decisional control on cyberloafing behavior among Civil Servants (Pegawai Negeri Sipil/PNS) in Nagan Raya Regency, Indonesia. The explanatory approach was selected because it enables the testing of causal relationships among variables and provides empirical evidence regarding the proposed research hypotheses.

The population consisted of all Civil Servants working in selected Regional Government Organizations (Organisasi Perangkat Daerah/OPD) in Nagan Raya Regency. Using a purposive sampling technique, respondents were selected based on predetermined criteria, including being an active civil servant, having access to the internet during working hours, and utilizing computers or smartphones to support daily work activities. Based on these criteria, a total of 169 respondents participated in this study.

Primary data were collected through a structured questionnaire distributed directly to respondents. All measurement items were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire consisted of four constructs: behavioral control, cognitive control, decisional control, and cyberloafing. The measurement indicators for behavioral control, cognitive control, and decisional control were adapted from the self-control dimensions developed by Azmi (2023) and Tibrizi (2021), while the cyberloafing construct was measured using the indicators of activity browsing and activity emailing adapted from Azmi (2023).



Before the main survey was conducted, the questionnaire was reviewed to ensure the clarity, relevance, and comprehensibility of all measurement items.

Data analysis was performed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4 software. The measurement model (outer model) was evaluated through indicator reliability using outer loadings (≥ 0.70), convergent validity using the Average Variance Extracted ($AVE \geq 0.50$), discriminant validity using the Heterotrait–Monotrait Ratio (HTMT), and internal consistency reliability using Composite Reliability and Cronbach's Alpha (≥ 0.70). Subsequently, the structural model (inner model) was assessed using the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and path coefficients to examine the relationships among latent variables. Hypothesis testing was conducted through the bootstrapping procedure with 5,000 resamples, and statistical significance was determined based on t-values greater than 1.96 and p-values below 0.05.

RESULTS AND DISCUSSION

The descriptive analysis indicates that the respondents generally demonstrated a relatively high level of self-control across the three dimensions of behavioral control, cognitive control, and decisional control. Conversely, the level of cyberloafing behavior among Civil Servants in Nagan Raya Regency was relatively low, suggesting that most respondents were able to regulate their online activities during working hours. These findings imply that self-control plays an important role in minimizing employees' engagement in non-work-related internet activities within government institutions.

The evaluation of the measurement model confirmed that all constructs satisfied the recommended validity and reliability criteria. All indicator loadings exceeded the minimum threshold of 0.70, indicating satisfactory indicator reliability. Furthermore, the Average Variance Extracted (AVE) values were above the recommended value of 0.50, namely behavioral control (0.728), cognitive control (0.687), decisional control (0.804), and cyberloafing (0.869), demonstrating adequate convergent validity. Composite Reliability values ranged from 0.963 to 0.995, while Cronbach's Alpha values ranged from 0.959 to 0.995, confirming excellent internal consistency. Discriminant validity was established using the Fornell–Larcker Criterion, where the square root of AVE for each construct exceeded its correlations with other constructs, as presented in Table 1. In addition, all Heterotrait–Monotrait Ratio (HTMT) values were below the recommended threshold of 0.90, indicating satisfactory discriminant validity.

Table 1. Fornell–Larcker Criterion

Construct	BC	CC	DC	CL
Behavioral Control (BC)	0.853			
Cognitive Control (CC)	0.495	0.829		
Decisional Control (DC)	0.652	0.540	0.897	
Cyberloafing (CL)	-0.716	-0.695	-0.757	0.932

Source: Primary data processed using SmartPLS 4 (2026).

The structural model also demonstrated substantial explanatory power. The coefficient of determination (R^2) for cyberloafing was 0.738, indicating that behavioral control, cognitive control, and decisional control collectively explained 73.8% of the variance in cyberloafing behavior,



whereas the remaining 26.2% was influenced by other variables outside the proposed model. Furthermore, the effect size (f^2) analysis revealed moderate contributions from behavioral control (0.190), cognitive control (0.302), and decisional control (0.275), with cognitive control providing the largest contribution to the explanation of cyberloafing behavior.

Hypothesis testing was performed using the bootstrapping procedure in SmartPLS 4. The results demonstrated that behavioral control had a significant negative effect on cyberloafing ($\beta = -0.302$, $t = 5.034$, $p < 0.001$), supporting the first hypothesis. Cognitive control also showed a significant negative effect on cyberloafing ($\beta = -0.343$, $t = 6.428$, $p < 0.001$), confirming the second hypothesis. Likewise, decisional control significantly and negatively influenced cyberloafing ($\beta = -0.375$, $t = 6.098$, $p < 0.001$), supporting the third hypothesis. Among the three dimensions of self-control, decisional control exerted the strongest influence on reducing cyberloafing behavior. The complete hypothesis testing results are presented in Table 2.

Table 2. Path Coefficients and Hypothesis Testing

Hypothesis	Relationship		Path Coefficient (β)	t-Statistic	p-Value	Result
H1	Behavioral Cyberloafing	Control	→ -0.302	5.034	0.000	Supported
H2	Cognitive Cyberloafing	Control	→ -0.343	6.428	0.000	Supported
H3	Decisional Cyberloafing	Control	→ -0.375	6.098	0.000	Supported

Source: SmartPLS Bootstrapping Output (2026).

The findings support the Self-Regulation Theory, which proposes that individuals continuously regulate their behavior, cognition, and decision-making processes to achieve desired goals while resisting immediate temptations. Employees possessing stronger behavioral control are more capable of regulating observable actions and complying with organizational rules, thereby reducing the likelihood of engaging in cyberloafing. Likewise, employees with stronger cognitive control are better able to maintain concentration, process information efficiently, and resist digital distractions encountered during working hours. Furthermore, employees demonstrating stronger decisional control are more likely to evaluate the consequences of their actions before making behavioral decisions, enabling them to prioritize organizational responsibilities over personal internet use.

The negative relationships identified in this study indicate that strengthening employees' self-control substantially reduces cyberloafing behavior. Among the three dimensions, decisional control emerged as the strongest predictor, suggesting that employees' ability to make rational decisions and evaluate the consequences of their behavior is particularly important in preventing counterproductive internet use within public organizations. These findings are consistent with previous studies reporting that higher levels of self-control significantly reduce cyberloafing and other forms of counterproductive work behavior.

From a practical perspective, government institutions should not only implement clear internet usage policies but also strengthen employees' self-regulation through behavioral discipline programs, attention management training, and decision-making development. Such initiatives are



expected to minimize cyberloafing behavior while simultaneously enhancing employee productivity and improving the quality of public services.

CONCLUSION

This study concludes that behavioral control, cognitive control, and decisional control have significant negative effects on cyberloafing behavior among Civil Servants in Nagan Raya Regency. The findings indicate that employees with higher levels of self-control are less likely to engage in non-work-related internet activities during working hours. Among the three dimensions, decisional control demonstrates the strongest influence in reducing cyberloafing behavior, followed by cognitive control and behavioral control. Furthermore, the structural model explains 73.8% of the variance in cyberloafing behavior, indicating that self-control is a substantial determinant of employees' online behavior in the workplace.

The study contributes to the development of Self-Regulation Theory by providing empirical evidence that behavioral control, cognitive control, and decisional control are important mechanisms for preventing cyberloafing in public sector organizations. Practically, the findings suggest that government institutions should strengthen employees' self-regulation through behavioral discipline, attention management, and decision-making development programs, accompanied by clear policies regarding internet use during working hours. Future studies are recommended to incorporate additional variables, such as organizational commitment, work discipline, organizational culture, job satisfaction, or leadership style, and to employ broader samples and longitudinal research designs to obtain a more comprehensive understanding of cyberloafing behavior.

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