

THE RELATIONSHIP BETWEEN SELF-CONTROL AND CYBERLOAFING BEHAVIOR IN GENERATION Z EMPLOYEES IN YOGYAKARTA

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ABSTRACT

The increasing use of the internet in the workplace among Generation Z employees has raised the potential for cyberloafing behavior, which has become increasingly noticeable. This study aimed to examine the relationship between self-control and cyberloafing among Generation Z employees in Yogyakarta. It was hypothesized that self-control would have a negative relationship with cyberloafing, meaning that higher self-control would reduce the likelihood of cyberloafing, and vice versa. This study involved 127 Generation Z employees working in Yogyakarta using a purposive sampling technique. Data were collected using the Self-Control Scale and the EWCS Cyberloafing Scale and analyzed using Pearson product-moment correlation. The analysis showed a correlation coefficient of $r = .382$, $p < .001$, indicating a moderate positive relationship between self-control and cyberloafing. The effect size ($r^2 = .146$) suggests that self-control accounts for approximately 14.6% of the variance in cyberloafing behavior, indicating that other factors also play a significant role. These findings contradict the initial hypothesis predicting a negative relationship, highlighting the complexity of cyberloafing behavior among employees who are accustomed to using digital technology. This study contributes to a broader understanding of cyberloafing by showing that such behavior is not always triggered by low self-control but can also be influenced by work conditions, digital habits, and psychological adaptation needs. The research implications suggest that organizations should consider situational and organizational factors when addressing cyberloafing among Generation Z employees.

Keywords: cyberloafing, employees, Generation Z, self-control

Introduction

The rapid integration of digital technologies into modern organizational settings has reshaped how employees communicate, complete tasks, and access information. Internet connectivity has become a fundamental workplace resource, enabling efficiency and flexibility across various job roles. However, this increased accessibility has also created behavioral challenges, one of which is cyberloafing, defined as employee's engagement in non-work-related online activities during working hours (Lim, 2002). Activities such as browsing social media, streaming entertainment, online shopping, or personal messaging have become increasingly common in many industries (Wong et al., 2023). In Indonesia, cyberloafing duration among employees has been reported to reach approximately 4–5 hours per day (Hartijasti, 2016). Previous research involving Generation Z employees also found high levels of cyberloafing behavior, indicating that this phenomenon is increasingly relevant in digital workplaces.

Population growth worldwide has led to the emergence of multiple generations, from Baby Boomers to Generation Z, the first generation to grow up fully exposed to digital technology from an early age (Firamadhina & Krisnani, 2021). Generation Z has been raised in an environment of rapid technological advancement and high-speed internet, which has shaped their habits, social interactions, and cognitive skills (Silitonga & Tampomuri, 2024). According to (Putri, 2024) Generation Z exhibits higher levels of creativity, flexibility, and openness compared to previous generations, which allows them to adapt quickly to new situations and work environments. Furthermore, these digital-native characteristics, including frequent engagement with online platforms and social media, influence the way Generation Z employees manage boundaries between personal and professional online activities (Ramadhani & Khoirunisa, 2025).

Recent demographic trends indicate that Generation Z, individuals born between 1997 and 2012, is steadily entering the workforce and bringing distinct digital habits shaped by lifelong exposure to technology (Dimock, 2018). In Indonesia, this generation represents the most active digital user group, accounting for 34.40 percent of national internet usage (APJII, 2024). Research shows that Generation Z spends extensive daily hours on digital platforms and demonstrates strong multitasking abilities (Wijoyo et al., 2020). These characteristics may influence how they navigate boundaries between work related and personal online activities.

The increasing prevalence of cyberloafing has encouraged researchers to explore its underlying causes. Traditionally, cyberloafing has been categorized as a form of counterproductive work behavior and is frequently associated with low self-control or difficulty regulating attention (Fitriani, 2020). Self-control, as defined by (Averill, 1973), is an individual's capacity to regulate impulses, manage cognitive processes, and make decisions aligned with personal goals. Previous studies generally show that individuals with high self-control tend to avoid behaviors that reduce productivity, including cyberloafing (Sari & Imawati, 2023).

However, findings from the past decade challenge this conventional perspective. Several studies propose that cyberloafing may serve adaptive psychological functions, such as stress reduction, emotional recovery, and restoration of cognitive resources (Novianti & Roz, 2023). From this point of view, cyberloafing is not merely a result of poor self-regulation but may represent an intentional strategy used by employees to maintain well-being and performance. Workplaces with flexible structures or minimal supervision may also contribute to the normalization of this behavior (Malau & Muhammad, 2022).

These contrasting findings highlight a research gap regarding how self-control interacts with cyberloafing in digital native employee populations. Generation Z employees in Yogyakarta, a city known for its academic, cultural, and creative sectors, may demonstrate distinctive patterns of online behavior influenced by both technological familiarity and workplace norms. However, empirical studies on this relationship within the Indonesian context remain limited.

Therefore, this study aims to examine the relationship between self-control and cyberloafing among Generation Z employees in Yogyakarta. Understanding this relationship will help clarify whether self-control continues to function as a protective factor against cyberloafing or whether cyberloafing serves alternative psychological purposes for digital native workers. The results are expected to contribute to ongoing discussions on digital workplace behavior and provide practical insights for organizational policy and employee management.

Methods

This study used a quantitative correlational design to examine the relationship between self-control and cyberloafing.

2.1 Participants

The participants consisted of 127 Generation Z employees aged 18–26 years who were currently employed in various industries in Yogyakarta. The sampling technique used was purposive sampling, based on these criteria:

- (1) Employees aged 18–26;
- (2) Currently employed;
- (3) Have internet access during working hours.

2.2 Instruments

Two standardized instruments were used:

1. Self-Control Scale

Self-control was measured using a standardized self-control scale based on Averill's (1973) conceptualization, which includes the ability to regulate impulses, manage cognitive processes, and make goal-directed decisions. The scale used in this study demonstrated adequate reliability.

2. Cyberloafing Scale

Cyberloafing was assessed using the Employee Workplace Cyberloafing Scale (EWCS), which measures the frequency of employees' engagement in personal online activities during work hours. The scale evaluates behaviors such as accessing social media, entertainment sites, or personal messaging platforms.

2.3 Procedure

Data collection was conducted online through Google Forms. Participants received information about the study, provided informed consent, and then completed demographic questions and both research scales.

2.4 Data Analysis

Pearson's product-moment correlation was used to examine the relationship between self-control and cyberloafing. Prior to conducting the analysis, normality and linearity tests were performed to ensure the data met the assumptions required for parametric correlation analysis.

Results

3.1 Descriptive Statistics

Table 1 presents the descriptive statistics for both research variables. The hypothetical data show a mean score of 32.5 for self-control and cyberloafing, with a standard deviation of 6.5. The empirical results indicate that participants scored moderately high on both variables. Self-control had an empirical mean of 43.17, with scores ranging from 27 to 51 (SD = 4.359). Cyberloafing had an empirical mean of 39.37, with scores ranging from 22 to 50 (SD = 7.459).

Table 1. Descriptive Statistics of Research Variables

Variabel	Data Hipotetik			Data Empirik				
	Mean	Skor		SD	Mean	Skor		
		Min	Max			Min	Max	
<i>Self Control</i>	32,5	13	52	6,5	43,17	27	51	4,359
<i>Cyberloafing</i>	32,5	13	52	6,5	39,37	22	50	7,459

3.2 Assumption Testing

Normality testing using the Kolmogorov-Smirnov method indicated that the distribution of both variables did not meet normality assumptions ($p < .05$). However, because the sample size exceeded 100 participants ($N = 127$), Pearson's correlation remained appropriate for use due to the robustness of parametric tests with large samples.

Table 2. Normality Test for Self-Control and Cyberloafing

Variabel	Kolmogorov-Smirnov ^a		
	Statistic	df	p-value
<i>Self Control</i>	0,122	127	0,000
<i>Cyberloafing</i>	0,213	127	0,000

The linearity test showed a significant linear relationship between self-control and cyberloafing ($p < .05$), indicating that the variables met the linearity requirement for correlation analysis.

Table 3. Linearity Test for Self-Control and Cyberloafing

	F		Sig	
	Between Groups (Combined)	Linearity	Between Groups (Combined)	Linearity
<i>cyberloafing</i> *				
<i>self control</i>	2,564	22,979	.001	.000

3.3 Hypothesis Testing

The hypothesis was tested using Pearson's product-moment correlation. Results showed a significant positive relationship between self-control and cyberloafing ($r = .382$, $p < .001$). The coefficient of determination ($r^2 = .146$) indicates that self-control explains approximately 14.6% of the variance in cyberloafing behavior.

Table 4. Pearson Correlation Between Self-Control and Cyberloafing

	Pearson Correlation	Sig.	R ²
<i>Self Control</i> *	0,382	0,000	0,146
<i>Cyberloafing</i>			

These findings demonstrate a moderate positive association, suggesting that higher levels of self-control were associated with higher levels of cyberloafing among the participants.

3.4 Categorization analysis

- Self-Control

The categorization of participants' self-control scores is presented in Table 5.

Table 5. Categorization of Self-Control Scale

Category	Criteria	Score	N	Percentage
High	$X > \mu + 1. \sigma$	$X > 39$	101	80%
Moderate	$(\mu - 1. \sigma) < X \leq (\mu + 1\sigma)$	$26 < X \leq 39$	26	20%
Low	$X \leq \mu - 1. \sigma$	$X \leq 26$	0	0%
		Total	127	100 %

Based on the categorization results of the self-control scale, 101 participants (80%) were classified in the high category, 26 participants (20%) in the moderate category, and 0 participants (0%) in the low category. Therefore, it can be concluded that most participants in this study have high levels of self-control.

- Cyberloafing

The categorization of participants' cyberloafing scores is presented in Table 6.

Table 6. Categorization of Cyberloafing Scale

Category	Criteria	Score	N	Percentage
High	$X > \mu + 1. \sigma$	$X > 39$	72	57%
Moderate	$(\mu - 1. \sigma) < X \leq (\mu + 1\sigma)$	$26 < X \leq 39$	45	35%
Low	$X \leq \mu - 1. \sigma$	$X \leq 26$	10	8%
		Total	127	100 %

Based on the categorization results of the self-control scale, 101 participants (80%) were classified in the high category, 26 participants (20%) in the moderate category, and 0 participants (0%) in the low category. Therefore, it can be concluded that most participants in this study have high levels of self-control.

Discussions

The present study examined the relationship between self-control and cyberloafing among Generation Z employees in Yogyakarta. The findings indicate that self-control is significantly associated with cyberloafing behavior, although the direction of this relationship differs from conventional assumptions. Traditionally, self-control has been conceptualized as a protective factor that reduces counterproductive behaviors in the workplace (Fitriani, 2020). Higher levels of self-control were associated with lower levels of cyberloafing behavior (Sari & Imawati, 2023). These findings are consistent with the general theoretical assumption that self-control enables individuals to regulate impulses and focus on task-relevant activities.

However, the current study suggests a more nuanced understanding. Cyberloafing may serve as a restorative coping mechanism that allows employees to manage work-related stress and restore emotional balance (Novianti & Roz, 2023). Employees experiencing higher work stress tend to engage in cyberloafing as a form of psychological relief (Aziswidiyanto & Laksmiwati, 2024). This interpretation aligns with the view that counterproductive behaviors are not always harmful; they can have adaptive functions depending on context, such as preventing burnout and sustaining productivity over time.

External factors beyond individual traits also play a critical role. Workplace conditions, job fatigue, and unclear internet usage policies contribute to the prevalence of cyberloafing (Kaloko et al., 2022). Moreover, the increasing integration of digital technologies in organizations has blurred the boundaries between work-related and personal online activities, making occasional cyberloafing more frequent and socially acceptable in modern workplaces (Wong et al., 2023). These findings indicate that organizational environment and policy clarity can either constrain or facilitate cyberloafing behaviors.

Generational characteristics further explain this phenomenon. Generation Z employees are highly accustomed to using multiple digital devices simultaneously during work activities (Al-Saggaf & MacCulloch, 2019). This generation demonstrates strong multitasking abilities and continuous digital engagement (Yeşilyurt & Karaduman, 2025).

In the present study, these characteristics may explain why a substantial proportion of participants were categorized as having high self-control (80%) while simultaneously exhibiting high levels of cyberloafing (57%). Among Generation Z employees, frequent online activity does not necessarily reflect deficient self-regulation. Rather, digital engagement may be embedded within their work patterns and daily routines.

Furthermore, increasing digital integration within organizations has blurred the boundaries between work-related and personal online activities (Wong et al., 2023). When appropriately regulated, limited cyberloafing may function as a brief restorative break that helps maintain concentration and productivity (Malau & Muhammad, 2022). In demanding work environments, Generation Z employees may perceive cyberloafing not as deviant behavior but as a strategy to maintain psychological well-being (Fakhriya, 2024).

Therefore, among Generation Z employees, cyberloafing may coexist with high self-control as part of adaptive digital behavior rather than indicating impulsivity or poor regulation. These generational tendencies suggest that digital literacy and technological familiarity may mediate the relationship between self-control and cyberloafing.

From a behavioral regulation perspective, the categorization results indicating that the majority of participants demonstrated high levels of self-control (80%) suggest that employees possess adequate capacity for behavioral monitoring and impulse regulation. However, high self-control does not necessarily imply the complete avoidance of non-work-related online activities. Rather, individuals with strong self-regulatory capacities may intentionally engage in controlled forms of cyberloafing as brief restorative breaks (Lim & Chen, 2012).

Self-control enables employees to regulate the duration, frequency, and intensity of cyberloafing rather than eliminating it entirely (Moqbel & Nah, 2017). In this context, cyberloafing may function as a self-regulatory strategy to manage cognitive fatigue and maintain task performance. Previous research has also suggested that self-control involves flexible behavioral adjustment according to situational demands, rather than rigid behavioral suppression (Gillebaart, 2018).

Therefore, the predominance of high self-control observed in this study may explain why cyberloafing remains present but does not necessarily reflect impulsivity or behavioral dysfunction. Instead, it may indicate adaptive regulation, where employees balance task responsibilities with short psychological recovery periods. These findings reinforce the view that self-control facilitates strategic behavioral management rather than total behavioral restriction.

Organizational dynamics further interact with individual traits in shaping employee behavior. Self-control may function alongside perceptions of organizational justice in influencing workplace conduct (Restubog et al., 2011). In this context, limited cyberloafing may serve as a micro-break strategy that helps employees sustain concentration and productivity when appropriately managed (Malau & Muhammad, 2022). These results

suggest that organizations can play a supportive role by designing policies that allow controlled micro-breaks rather than enforcing rigid restrictions on online behavior.

Overall, the present findings indicate that cyberloafing among Generation Z employees should not be interpreted solely as a failure of self-control. Instead, cyberloafing is a complex behavioral phenomenon shaped by psychological regulation, technological familiarity, organizational culture, and generational characteristics. Understanding cyberloafing as a potentially adaptive behavior emphasizes the importance of contextual analysis, allowing organizations to develop balanced policies that both maintain productivity and support employee well-being. These findings also open avenues for future research, such as investigating the optimal duration and frequency of cyberloafing as a restorative strategy, and exploring differences across organizational cultures or job types.

Conclusion

This study examined the relationship between self-control and cyberloafing among Generation Z employees in Yogyakarta and found a significant positive correlation between the two variables. The results indicate that cyberloafing among digital-native employees may not simply stem from low self-regulation but may also serve functional purposes such as managing workload demands, restoring mental energy, or balancing personal and professional digital activities. These findings highlight the need to understand cyberloafing within the broader context of modern digital work environments rather than solely as counterproductive behavior. The study also emphasizes the importance of developing organizational policies that acknowledge the unique digital habits of Generation Z employees while still promoting responsible and productive technology use in the workplace.

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