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Antecedents of Cyberloafing among Administrative Employees in Ethiopian Higher Education Institutions: A Theory of Interpersonal Behavior Perspective

By

Fantahun Zewdu Fantabil[1], Asemamaw Tilahun Debas[2], Teshale Birhanu Tiruneh[3]

Abstract

This study examines the antecedents of cyberloafing among Administrative staff members in Ethiopian public higher education institutions in Amhara Regional State, Ethiopia, using the Theory of Interpersonal Behavior (TIB). An explanatory and descriptive research design, utilizing a quantitative cross-sectional survey, was conducted across four universities selected through a proportional simple random sampling method. A total of 332 usable responses were collected using validated measurement instruments, and the data were analyzed with partial least squares structural equation modeling (SmartPLS). The findings revealed that perceived consequences, affect, and social factors significantly influence employees' intentions to cyberloaf, with social factors emerging as the strongest predictor. Intention is the most powerful determinant of actual cyberloafing behavior, followed by habit, while facilitating conditions show a weaker yet significant effect. These results support the applicability of TIB in explaining workplace cyberloafing by highlighting the combined roles of cognitive evaluations, emotional responses, social norms, and habitual tendencies. The study contributes theoretically by extending TIB to a non-Western and public-sector higher education context. Practically, it offers insights for developing balanced digital-use policies, promoting ethical internet practices, and fostering supportive work environments that discourage excessive personal internet use. Overall, the study seeks holistic, socially informed, and context-based strategies to manage cyberloafing in higher education institutions.

Keywords: Cyberloafing, Theory of Interpersonal Behavior, Higher Education institutions, Ethiopia.

1. Introduction

1 PhD candidate, Department of Management, zewdufantahun2@gmail.com, University of Gondar, Ethiopia.
2 Associate Professor, Department of Management, ase2034@gmail.com, University of Gondar, Ethiopia.
3 Associate Professor, Department of Management, teshalebir@yahoo.com, University of Gondar, Ethiopia.

The rapid development of the internet and digital advancement has revolutionized workplaces worldwide, fostering increased connectivity, efficiency, and flexibility. Yet, these very technologies have also brought forth new behavioral challenges, with cyberloafing employees utilizing organizational internet resources for personal interest during working time becoming progressively more common. Typical examples of cyberloafing include surfing social media, shopping online, or watching videos while on the job. Research indicates that as many as 90% of employees partake in some form of internet misuse during work hours (Blanchard & Henle, 2008), highlighting a significant issue for organizations striving to uphold productivity and digital discipline.

Investigations into cyberloafing reveal differing opinions. Some studies highlight its negative effects, including lower performance, unfinished tasks, and possible financial or security risks for organizations (Andel et al., 2019; Khansa et al., 2018; Huma et al., 2017). Other research points out potential advantages, such as stress relief, improved creativity, and higher job satisfaction (Akar & Coskun, 2020; Lim & Chen, 2012). These contrasting findings lead to a debate on whether cyberloafing should be seen as a harmful or beneficial behavior in the workplace.

Most current research focuses on the consequences of cyberloafing, but there has been little attention on its causes. Gaining insight into the factors that motivate workers to involve in cyberloafing is important for developing effective interventions. The TIB provides a helpful framework for this analysis. It suggests that actual behavior is influenced by intention, habit, and enabling conditions, with intention shaped by perceived results, feelings, and social influences (Koay et al., 2017; Moody & Siponen, 2013).

Despite the critical role of Higher Education Institutions (HEIs) in national development, cyberloafing among administrative personnel, who are essential in facilitating teaching, research, and management (Sebalj et al., 2012), has been largely neglected. This problem is especially evident in Ethiopia, where higher education institutions (HEIs) depend significantly on technology yet encounter difficulties in sustaining workforce productivity. As internet access becomes more widespread in the educational field, it is crucial to comprehend the reasons behind cyberloafing among administrative personnel and its impact on job performance. This research is particularly relevant in light of the growing trend of employees prioritizing online activities over their duties (Chavan et al., 2022), which can jeopardize organizational effectiveness and job quality (Karthikeyan & Thomas, 2017).

In this context, gaining a deeper insight into the motivational and contextual elements that drive cyberloafing among administrative staff in Ethiopian public HEIs is both timely and vital. Utilizing the TIB, this study investigates how perceived outcomes, emotions, social influences, habits, and enabling conditions influence workers' motive to engage in cyberloafing and, consequently, their actual cyberloafing actions. The research enriches the existing literature by adapting TIB to a non-Western higher education setting, providing empirical data from the Ethiopian public sector, and offering practical recommendations for formulating balanced, evidence-based digital-use policies that can boost employee productivity while recognizing human behavioral patterns.

2. Theoretical Foundation

2.1. Theory of Interpersonal Behavior (TIB) Model

The TIB, initially created by Triandis (1977, 1980), is a broad behavioral model that is made of the Theory of Reasoned Action (TRA) and the Theory of Interpersonal Behavior (TPB) by incorporating

emotional and social aspects of human actions. In contrast to the solely cognitive emphasis of TRA and TPB, the TIB recognizes that behavior is affected not only by rational assessments but also by emotional reactions, social pressures, and habitual behaviors. This characteristic renders TIB particularly effective in elucidating intricate workplace behaviors like cyberloafing, which encompass both deliberate and automatic elements (Moody & Siponen, 2013).

The TIB asserts that behavior is influenced by three key components: intention, habit, and facilitating conditions. Intention denotes a deliberate engagement in a certain behavior, whereas habit denotes the automatic inclination to replicate previously executed behaviors in comparable situations. Facilitating conditions include environmental or situational elements that either promote or hinder behavior (Triandis, 1980). Intention itself is influenced by three precursors: perceived consequences, which pertain to cognitive assessments of the anticipated results of the behavior; affect, which signifies emotional reactions towards executing the behavior; and social factors, which encompass perceived norms, roles, and expectations from significant reference groups such as colleagues and supervisors (Pee et al., 2008; Betts et al., 2014). As illustrated in Figure 1 below, the TIB functions at three interconnected levels. The first level examines personal and contextual elements, including beliefs, values, and social norms. The second level addresses the cognitive and affective processes that form behavioral intention. The third level describes how intention, habit, and situational enablers combine to produce actual behavior. Prior research across domains such as technology misuse and software piracy shows that TIB offers strong explanatory power that TRA and TPB (Moody & Siponen, 2013; Pee et al., 2008), acknowledging that behavior is often driven by emotion and habit rather than purely rational choice.

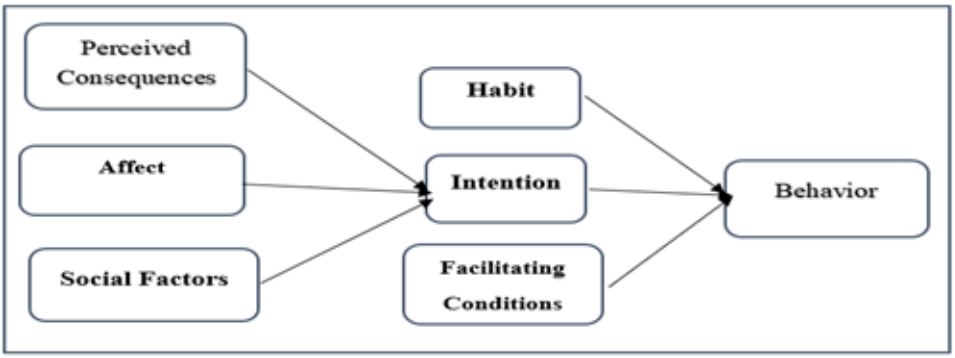

Figure 1: Theoretical Model of Interpersonal Behavior (Adapted from Triandis, 1980)

3. Development of Hypothesis

3. 1. Perceived consequence with the Intention of cyberloafing

According to TIB, an act is viewed as having possible outcomes that can be either positive or negative, along with the likelihood of each outcome occurring. The specific actions and the expected results influence a person's decision to behave in a certain way. Perceived consequences related to cyberloafing refer to how much an individual views cyberloafing behavior as having good or bad value. This involves assessing the total range of results from using the Internet at work for non-work-related reasons. Similar to the idea of perceived usefulness in the Technology Acceptance Model (TAM) theory, positive perceived outcomes of the behavior increase the chances that a person will engage in it. Existing research shows

that favorable perceived consequences are positively linked to cyberloafing(Betts et al., 2014; Huma et al., 2017; Koay et al., 2017; Pee et al., 2008; Salina & Saidin, 2019).

H1: Perceived favorable consequences are positively related to employees' intention to cyberloaf

3.2. Affect with the intention of cyberloafing

Triandis (1980) highlighted that an employee's decision-making is influenced by both cognitive factors and emotions, which play a significant role in the process. Emotional responses can be positive, negative, or a combination of both, and they vary in intensity. Decisions driven by emotions are often distinct from those based on rational evaluations of consequences. Affect, which typically operates at an unconscious level, is shaped by instinctive behavioral reactions to specific circumstances (Parikh & Gupta, 2010). In the situation of cyberloafing, these feelings are linked to the use of the Internet for personal purposes at work, which may workers used emotionally to cope with workplace challenges (Blanchard & Henle, 2008).

Koay et al. (2017) found a significant positive association between affect and the intention to cyberloaf. Their interviews revealed that employees often feel enjoyment, excitement, and pleasure when using interpersonal reasons. This finding aligns with the results of (Betts et al., 2014) and (Moody & Siponen, 2013), who demonstrated that stronger positive emotions toward cyberloafing are related with higher intentions to engage in the behavior.

H2: Affect has a positive and significant effect on intention to cyberloaf

3.3. Social factors with Intention to Cyberloaf.

Social factors encompass the perceived approval or disapproval of certain behaviors by key referent groups, such as co-workers, supervisors, and the overarching organizational culture (Betts et al., 2014). When employees perceive that their peers or managers either tolerate or actively take part in cyberloafing, they are highly inclined to form intentions to engage in similar behavior. In contrast, strong disapproval from reference groups serves to deter such actions (Moody & Siponen, 2013).

Prior studies have established that social influence and subjective norms are pivotal in influencing workplace internet misuse (Askew et al., 2014). In settings where cyberloafing is regarded as socially acceptable, the likelihood of individuals intending to partake in it rises significantly. Research conducted by Galletta & Polak (2003) illustrated that both a supportive peer culture and leniency from supervisors are closely associated with personal internet usage, thereby reinforcing the impact of social factors in either promoting or inhibiting cyberloafing. Existing literature consistently indicates that social factors are crucial predictors of employees' intentions to engage in cyberloafing (Salina & Saidin, 2019; Betts et al., 2014; Moody & Siponen, 2013).

H3: Social factors have a positive and significant effect on employees' intention to cyberloaf.

3.4 Intention to Cyberloafing

As TIB, intention is a person's deliberate plan or self-instruction to carry out a behavior (Triandis, 1980). This definition was further developed by(Pee et al., 2008), who defined intention as a subjective probability that connects people to a behavior and shows the amount of effort they are willing to put forth to participate in it. Higher levels of intention are thought to increase the likelihood of actually engaging

in the intended behavior, making intention a crucial cognitive antecedent of behavior. Empirical research consistently supports this relationship (Betts et al., 2014; Huma et al., 2017; Salina & Saidin, 2019).

In the context of cyberloafing, intention refers to an individual's willingness to misuse the internet in the workplace as part of their decision-making process (Askew et al., 2014). Research has repeatedly affirmed the significant association between intention and behavior, demonstrating that intention determines employees' engagement in cyberloafing (Woon & Pee, 2004; Betts et al., 2014). As employees develop stronger intentions to cyberloaf, they are more likely to pass these intentions to real behavior. Assuming the established relationship between intention and behavior in numerous studies, researchers have consistently hypothesized that intention positively influences cyberloafing behavior.

H4: Employees' intention to cyberloaf has a positive and significant effect on cyberloafing.

3.5. Habit and Cyberloafing.

Habit is defined as a learned series of actions that occur automatically in response to particular situational cues (Ouellette & Wood, 1998). When workers repeatedly access the internet for non-work-related purposes during working time, this behavior can become habitual, thereby diminishing the necessity for conscious decision-making (Garrett & Danziger, 2008). Over time, cyberloafing evolves into an automatic behavior that continues even without a strong intention (Woon & Pee, 2004; Verplanken & Wood, 2006). Research indicates that habit serves as a significant factor in repeated internet usage and is a more robust predictor of cyberloafing than intention in certain contexts (Moody & Siponen, 2013; Betts et al., 2014).

H5: Habit has a positive and significant effect on employees' cyberloafing behavior.

3.6. Facilitating Conditions with Cyberloafing

Facilitating conditions refer to environmental elements that either enable or restrict behavior by offering resources, opportunities, or obstacles (Triandis, 1980). In workplace environments, such conditions may encompass internet accessibility, privacy, inadequate monitoring systems, and lenient organizational policies (Pee et al., 2008; Jia et al., 2013). Employees are more inclined to engage in cyberloafing when organizational settings present opportunities and minimal oversight, while stringent policies and monitoring systems tend to diminish such behaviors (Glassman et al., 2015). Although empirical findings regarding this relationship are inconsistent (Pee et al., 2008; Moody & Siponen, 2013), it is still reasonable to believe that enabling conditions can promote cyberloafing.

H6: Facilitating conditions have a positive and significant effect on cyberloafing behavior.

4. Control Variables

Prior studies indicate that demographic elements like age and gender may influence cyberloafing tendencies (Stanton, 2002; Vitak et al., 2011). To ensure robustness, these variables are controlled for in the analysis. Accordingly, the conceptual framework (Figure 2) applies TIB to examine cyberloafing in public higher education institutions, offering both theoretical contributions and practical implications.

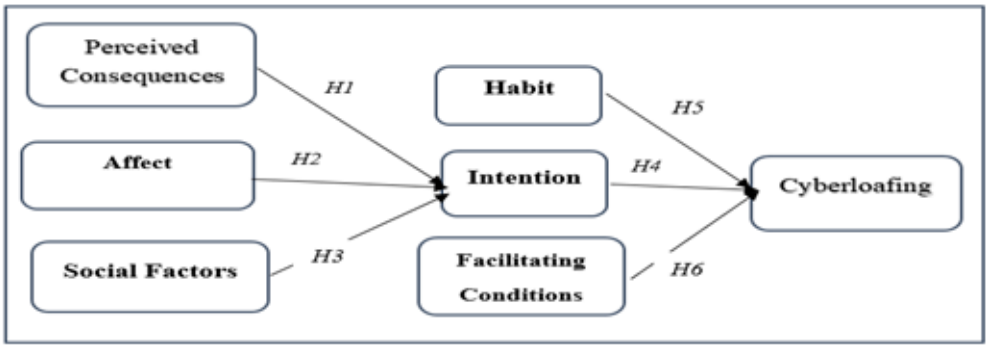

Figure 2: Conceptual Model of the Study (Adapted from Triandis, 1980; Moody & Siponen, 2013; Betts et al., 2014)

5. Methodology

The methodological choices, research design, sampling strategy, measurement instruments, and data analysis techniques were intentionally selected to correspond with the study's objectives, improve transparency, and guarantee reproducibility.

5.1 Research Design

A descriptive explanatory cross-sectional survey design was employed. It is adequate for the current research, in which the aim is to test theoretical interrelationships among latent constructs (perceived consequences, affect, social influences, intention, habit strength and weakening, and cyberloafing behavior) at one point in time. Cross-sectional research designs have been widely utilized in research on cyberloafing and workplace technology misuse because they enable cost-effective data collection from a large sample of participants and facilitate testing of hypotheses based on existing behavioral theory, such as the TPB (Moody & Siponen, 2013; Betts et al., 2014). Given that the study aims to explain variance and validate a theoretical model rather than establish temporal causality, this design is methodologically appropriate.

5.2 Population Sampling Procedure

The target population consisted of 8,266 administrative employees working across ten public universities in the Amhara Regional State of Ethiopia. Administrative employees were selected because they routinely use organizational internet resources and play a critical operational role in higher education institutions, making them particularly relevant for studying cyberloafing behavior.

A proportional simple random sampling technique was used to enhance sample representativeness. Public universities were first categorized into four generations based on their establishment periods, after which one university from each generation was selected using simple random sampling. Subsequently, proportional sampling was employed within each selected university to allocate questionnaires across campuses according to staff size. This strategy reduces sampling bias and ensures adequate subgroup representation.

The sample size was calculated by Taro Yamane (1967) formula with a 95% confidence level and a 5%

margin of error. This calculation aimed for a target sample of 382 respondents. Ultimately, 332 valid responses were collected, leading to an effective response rate of 86.9%. This sample size is sufficient for PLS-SEM, which focuses on statistical power and model complexity instead of strict distributional assumptions (Hair et al., 2019).

5.3 Measurement and Instrument

The study variables were assessed using established scales modified from previous studies to guarantee content validity and comparability. Cyberloafing was measured by CBLS-15 Bajcar & Babiak (2023), which aligned with the new debates on cyberloafing measurement (Akbulut et al., 2017). It includes four dimensions: reading information, social networking, personal issues, and gambling/adult sites, as well as an overall cyberloafing score (CBL). All 15 items were assessed on a five-point Likert scale ranging from 1 "never" to "5 very often."

Perceived consequences (reflective–formative) were measured through perceived benefits (5 items) and severity of negative consequences (5 items) using a 5-point Likert scale (Betts et al., 2014). Affect was measured with 4 items (Moody & Siponen, 2013; Betts et al., 2014), social factors with 5 items (Moody & Siponen, 2013), facilitating conditions with 5 items (Betts et al., 2014), habit with 8 items (Moody & Siponen, 2013), and intention with 3 items (Moody & Siponen, 2013), all using 5-point Likert scales.

5.4 Data Collection Procedure

Data were gathered by employing structured, self-administered questionnaires distributed in person to administrative employees. This method was chosen to improve response rates and allow clarification where needed. Anonymity and confidentiality were emphasized to encourage honest responses and reduce social desirability bias.

5.5 Common Method Bias

As the data for the dependent and independent constructs were collected from the same respondents, different techniques were applied to address common method bias. Procedurally, anonymity was assured MacKenzie & Podsakoff, 2012), clear instructions were provided, and ambiguous items were avoided. Statistically, Harman's single-factor test and variance inflation factor (VIF) analysis indicated that common method bias was unlikely to threaten the validity of the results. Statistically, Harman's single-factor test (Ramayah et al., 2011) showed the first factor accounted for only 25% of the variance, well below the 50% threshold of (Podsakoff & Organ, 1986), indicating bias was not a major issue. Additionally, VIF values were below 5 (Hair et al., 2021), confirming the absence of multicollinearity

5.6. Ethical Considerations

Ethical clearance was obtained from the University of Gondar College of Business and Economics Research and Ethics Committee with Serial Number 13805/07/2017 before data collection. All participants gave their informed consent after being informed about the goals, methods, risks, and advantages of the study. They were voluntary and confidential to participate. The data were anonymized and used solely for academic purposes.

6. Data Analysis and Results

6.1 Data Analysis Technique

The data was analyzed using PLS-SEM in SmartPLS software because it has specific strengths for explanatory, theory-driven research like ours. PLS-SEM effectively handles complex models that include both reflective and formative constructs. It does not assume multivariate normality, making it a good choice for testing the TIB in a non-Western organizational setting.

The analytical process had two main stages. First, we looked at the measurement model to confirm the reliability and validity of our constructs. We checked internal consistency, convergent validity, and discriminant validity. Next, we assessed the structural model by analyzing path coefficients, effect sizes (f^2), the coefficient of determination (R^2), predictive relevance (Q^2), and the standardized root mean square residual (SRMR) for overall model fit. To ensure our results were statistically sound, we used a bootstrapping procedure with 5,000 resamples to test the significance of all proposed relationships.

6.2. Descriptions of respondents' characteristics

In this section, the main factors studied included gender, work experience, and educational level. To show the data, the researchers used simple numbers and percentages. Looking at Table 1 below, the group had a good mix of men and women, with 47.9% men and 52.1% women, indicating a balanced gender representation. When it came to age, the group was spread out: 11.1% were under 25, 54.5% were between 25 and 34, 30.7% were between 35 and 44, and 6.6% were over 45. This suggests the people involved were experienced and could give reliable information. For the rest of the demographic variables, the details are seen in Table 1 below.

Table 1 Demographic profile of the respondents (n=332)

Variable	Category	Frequency	Percentage (%)
Gender	Male	159	47.9
	Female	173	52.1
Age	Under 25	37	11.1
	25 - 34	171	51.5
	35 - 45	102	30.7
	Over 45	22	6.6
Educational level	Master's Degree	44	13.3
	Bachelor Degree	189	56.9
	College Diploma	66	19.9
	High School	17	5.3
	Certificate	16	4.8
Years of experience	Below 1 year	27	8.1
	From 1 to 5 years	113	34
	From 6 to 10 years	125	37.7
	From 11to 15 years	34	10.2
	Above 15 Years	33	9.9
Marital Status			
	Single	163	49.1
	Married	152	45.8

	Divorced	14	4.2
	Others	3	0.9

Source: own survey data analysis, 2025.

6.3 Measurement Models Assessment

Following the two-stage protocol for higher-order constructs (Noor et al., 2015), we first established the convergent and discriminant validity of all first-order constructs. Then, we employed their latent scores as indicators to validate the integrated measurement model, which included the second-order reflective (cyberloafing) and reflective-formative (perceived consequences) constructs.

Guided by Hair et al. (2017), we assessed the model's internal consistency reliability, convergent validity, and discriminant validity. The results (Table 2) demonstrate a psychometrically sound model. Reliability metrics (Cronbach's alpha, composite reliability) for all constructs surpassed the 0.7 threshold. Convergent validity was confirmed with AVE values > 0.5 and strong indicator loadings. Consistent with methodological precedent, we retained indicators with loadings between 0.4 and 0.7, as their constructs' overall reliability and validity metrics remained acceptable.

Table 2: The Result Assessment of the measurement model for second-order constructs

First-order construct	Measurement Items	Loadings	Cronbach's Alpha	CR	AVE
Cyberloafing(CBL)	Social Networking(SN)	0.805	0.795	0.867	0.621
	Information Browsing(IB)	0.812			
	Personal Matters (PM)	0.847			
	Gambling/Adult contents(GA)	0.676			
Perceived Consequences	Perceived Benefits (PB)	0.877	0.722	0.878	0.783
	Severity of Negative consequences (PCNS)	0.893			
Intention (Int)	Int1	0.814	0.806	0.885	0.72
	Int2	0.879			
	Int3	0.851			
Facilitating Conditions(FC)	FC1	0.782	0.876	0.911	0.671
	FC2	0.819			
	FC3	0.817			
	FC4	0.843			
	FC5	0.834			
Habit(Hab)	Hab1	0.795			
	Hab2	0.793	0.919	0.934	0.638
	Hab3	0.827			

	Hab4	0.834			
	Hab5	0.822			
	Hab6	0.803			
	Hab7	0.745			
	Hab8	0.764			
Affect (Aff)	Aff1	0.783	0.813	0.877	0.641
	Aff2	0.828			
	Aff3	0.838			
	Aff4	0.75			

Source: own survey data analysis, 2025.

The discriminant validity of the constructs was assessed using two methods: the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio(Henseler et al., 2015). The Fornell-Larcker assessment, detailed in Table 3, confirmed that the square root of the AVE for each construct was greater than its correlations with all other constructs. Subsequently, the HTMT analysis (Table 4) indicated that all inter-construct ratios remained below the suggested threshold of 0.85. The combined results from these evaluations affirm that the constructs demonstrate adequate discriminant validity.

Table 4: Fornell-Larcker criteria

Constructs	**Aff**	**Fc**	**Hab**	**Int**	**CBL**	**PC**
Aff	0.800					
Fc	0.439	0.819				
Hab	0.389	0.423	0.798			
Int	0.536	0.649	0.438	0.848		
CBL	0.355	0.519	0.501	0.619	0.787	
PC	0.378	0.352	0.252	0.507	0.357	0.885

Table 4: Heterotrait-Monotrait ratio (HTMT)

Constructs	Aff	Fc	Hab	Int	cyber	PC
Aff						
Fc	0.519					
Hab	0.449	0.464				
Int	0.659	0.769	0.508			
CBL	0.434	0.602	0.555	0.763		
PC	0.491	0.439	0.304	0.658	0.459	

Source: own survey data analysis, 2025.

6.4 Formative Measurement Models

The formative constructs (Perceived Consequences and Social Factors) passed the necessary validation tests. Multicollinearity was not an issue, as all indicators of VIF values were below 5. Bootstrapping results (5,000 resamples) confirmed the statistical significance ($p < 0.05$) of all outer weights except one (SoFa3). Consistent with methodological recommendations (Hair et al., 2014), the non-significant indicator SoFa3 was retained based on its substantive loading above 0.5. As detailed in Table 6, these findings support the robustness of the formative measures used in the study.

Table 5: VIF for Perceived Consequences and Social Factors

Constructs	VIF
Severity of Negative Consequences	1.470
Perceived benefits	1.470
SoFa1	1.787
SoFa 2	1.775
SoFa3	1.508
SoFa4	1.368
SoFa5	1.511

Key SoFa = social factor, Source: own survey data analysis, 2025.

Table 6: The Significance and Relevance of the Formative Indicators

Formative Constructs	**Formative Indicators**	**Outer weights**	**Outer Loadings**	**t- Value**	**Significance Level**	**p-Value**
Social Factors	SoFa1	0.367	0.807	15.632	***	0.001
	SoFa2	0.299	0.770	14.441	***	0.005
	SoFa3	0.156	0.666	9.438	NS	0.148
	SoFa4	0.332	0.705	11.295	***	0.000
	SoFa5	0.203	0.671	10.298	**	0.036
Perceived Consequences	PNCS	0.584	0.893	16.801	***	0.000
	PB	0.546	0.877	17.378	***	0.000

Source: own survey data analysis, 2025.

Note: *NS = Not Significant, a. Bootstrap confidence intervals for 10% probability of error (alpha = 0.10), *** P<0.01 **P< 0.05*

6.5 Structural Model Assessment

The structural model serves as a fundamental component of PLS-SEM, as it evaluates the proposed relationships between latent constructs, validates theoretical assertions, and assesses indirect effects through established quality criteria and model fit metrics(Wang et al., 2024). In this research, the assessment included the analysis of path coefficient significance, effect size (f^2), coefficient of determination (R^2), and predictive relevance (Q^2). These metrics collectively ascertain the explanatory power and predictive ability of the model. Furthermore, techniques such as bootstrapping and model

fit diagnostics offer additional insights into the robustness of the findings. The detailed results for the structural model are presented in Table 8 below.

Concerning multicollinearity, the variance inflation factor (VIF) was analyzed. Values below five typically indicate acceptable levels of collinearity (Sarstedt et al., 2021). As illustrated in Table 7, the VIF scores for items related to cyberloafing and aspects of the theory of interpersonal behavior ranged from 1.426 to 4.20, confirming the absence of collinearity concerns and ensuring the independence of constructs. This procedure enhances methodological rigor and adheres to best practices in the literature(Sarstedt et al., 2021).

The assessment of the structural model is encapsulated in Figure 3 and Table 8. The model exhibits moderate explanatory power, with the predictors accounting for 46.9% of the variance in Intention (R^2 = 0.469) and 45.9% of the variance in Cyberloafing (R^2 = 0.459), coincided with the moderate threshold established by Hair et al. (2019).

An examination of effect sizes (f^2) indicates varying predictive contributions. Intention had the most significant impact on Cyberloafing (f^2 = 0.174, a medium effect), while Affective Factors and Social Factors on Intention demonstrated small-to-medium effects (0.123 and 0.138, respectively). Habit and Personal Control showed small effects. Facilitating Conditions showed a negligible influence (f^2 = 0.020), indicating a minimal unique contribution. These interpretations are anchored by established f^2 benchmarks (Cohen, 1998; Ringle et al., 2012)

The model also exhibits strong predictive relevance, as both Intention (Q^2 = 0.447) and Cyberloafing (Q^2 = 0.349) yielded Q^2 values well above zero (Hair et al., 2019). Model fit was acceptable, with an SRMR value of 0.076 which is under the 0.08 threshold for a good fit (Henseler et al., 2016). In summary, the proposed model is validated by moderate explanatory power, strong predictive relevance, and an acceptable global fit, with Intention confirmed as the key driver of Cyberloafing.

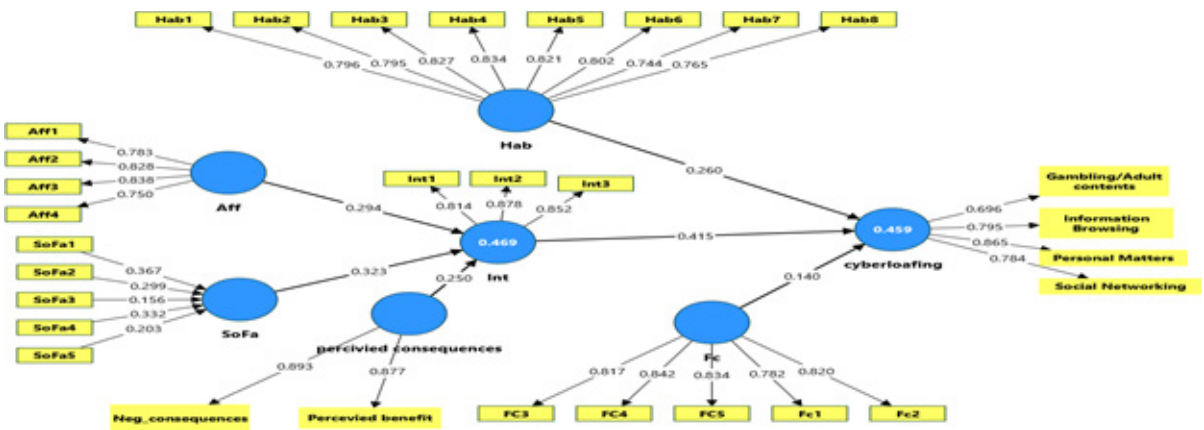

Figure. 3: Full structural Model

Table 7: Collinearity statistics value (VIF) of Reflective constructs

Constructs	VIF
SN	1.725
PM	1.848
IB	1.751
G/A	1.426
Neg_cons	1.470
PB	1.470
Aff1	1.702
Aff2	1.867
Aff3	1.847
Aff4	1.540
FC3	2.170
FC4	2.345
FC5	2.432
Fc1	1.836
Fc2	2.114
Habit1	3.929
Habit2	4.201
Habit3	2.928
Habit4	2.916
Habit5	3.615
Habit6	3.767
Habit7	2.274
Habit8	2.134
Int1	1.634
Int2	1.886
Int3	1.770
SoFa1	1.787
SoFa2	1.775
SoFa3	1.508
SoFa4	1.368
SoFa5	1.511

Source: own survey data analysis, 2025.

Key: SN= Social Networking, PM= Personal Matters IB=Information Browsing G/A= Gambling/ Adult Contents

Table 8: Quality criteria and Model fit summary

R^2		f^2		Q^2 predict		Model fit
Construct	Value	Construct	Value	Construct	Value	SRMR Value
Int	0.469	Aff -> Int	0.123	Int	0.447	0.076
CBL	0.459	Fc -> CBL	0.020	CBL	0.349	
		Hab -> CBL	0.097			
		Int -> CBL	0.174			
		PC -> Int	0.089			
		SoFa -> Int	0.138			

Source: own survey data analysis, 2025.

6.6 Hypothesis Testing

The structural model evaluation assures that all suggested hypotheses were supported. As shown in Table 9, perceived consequences exerted a significant positive influence on intention ($\beta = 0.250$, $t = 5.224$, $p < 0.001$), indicating that employees' perceptions of the benefit or side effect of cyberloafing shape their behavioral intentions. Affect was also a strong predictor of intention ($\beta = 0.294$, $t = 6.419$, $p < 0.001$), suggesting that emotional states substantially contribute to the formation of intention. Similarly, social factors had the strongest effect among the antecedents of intention ($\beta = 0.323$, $t = 6.711$, $p < 0.001$), underscoring the importance of peer influence and organizational norms in shaping behavioral choices.

In line with TIB, intention has emerged as the most significant factor influencing actual cyberloafing behavior ($\beta = 0.415$, $t = 7.852$, $p < 0.001$). Additionally, habit was identified as a noteworthy predictor ($\beta = 0.260$, $t = 5.579$, $p < 0.001$), indicating that habitual behavioral patterns enhance the probability of cyberloafing, irrespective of conscious decision-making. Facilitating conditions exhibited a weaker yet still significant correlation with cyberloafing ($\beta = 0.140$, $t = 2.847$, $p = 0.048$), underscoring the importance of organizational infrastructure and the availability of internet resources in facilitating such behavior.

Overall, these results validate the theoretical premises of TIB, wherein intention, habit, and contextual elements collectively elucidate employee participation in cyberloafing. Importantly, intention and social factors assume pivotal roles, emphasizing the necessity for organizations to take into account both social influence mechanisms and individual attitudes when formulating strategies to mitigate cyberloafing.

Table 9: Results of hypotheses

Hypothesis	paths	Beta	Mean	Standard deviation (STDEV)	T -statistics	P-values	Decisions
H1	PC -> Int	0.250	0.248	0.048	5.224	0.000	Accepted
H2	Aff -> Int	0.294	0.292	0.046	6.419	0.000	Accepted
H3	SoFa -> Int	0.323	0.333	0.048	6.711	0.000	Accepted
H4	Int -> CBL	0.415	0.413	0.053	7.852	0.000	Accepted

H5	Hab -> CBL	0.260	0.261	0.047	5.579	0.000	Accepted
H6	Fc -> CBL	0.140	0.143	0.049	2.847	0.000	Accepted

7. Discussions

This research aimed to explore the motivating factors to cyberloafing within higher education institutions in Ethiopia, utilizing TIB. The results lend empirical backing to the theoretical assertions of TIB, emphasizing the significance of intention, habit, social influence, and enabling conditions in influencing cyberloafing behavior. All six proposed hypotheses received support, highlighting the model's explanatory capacity.

Initially, perceived consequences were identified as having a substantial impact on employees' intentions to partake in cyberloafing. This finding indicates that employees assess the potential advantages and disadvantages linked to cyberloafing prior to establishing their behavioral intentions. This is consistent with previous research indicating that when individuals view cyberloafing as advantageous or low-risk, their propensity to intend to engage in it increases (Betts et al., 2014; Koay, 2018).

Emotional factors also surfaced as a significant predictor of intention, underscoring the influence of emotions in the decision-making process. Employees experiencing positive emotional states were more inclined to develop intentions to cyberloaf, aligning with earlier studies that suggest mood and emotions are pivotal in shaping workplace behaviors (Lim & Chen, 2012).

Among the factors influencing intention, social elements exhibited the most pronounced effect, signifying that peer behavior, organizational norms, and social influence are crucial in the development of cyberloafing intentions. This observation is particularly pertinent in higher education settings, where collaborative work environments and collegial networks dictate behavioral norms. It also corroborates (Ajzen (1991) claim within related behavioral theories that subjective norms wield a significant influence on intentions.

Intention, as expected, had the strongest direct effect on actual cyberloafing behavior. This is consistent with TIB and the Theory of Planned Behavior (TPB), both of which argue that intention is the most proximal predictor of behavior. This finding aligns with prior research (Askew et al., 2014; Vitak et al., 2011) showing that employees' expressed intentions strongly translate into actual workplace internet misuse.

Habit was also found to significantly influence cyberloafing, demonstrating that repeated behavioral patterns eventually become automatic and less dependent on conscious intention. This highlights the importance of considering not only rational evaluations but also ingrained behavioral tendencies in understanding cyberloafing. It resonates with prior evidence that habitual technology use contributes to persistent cyberloafing regardless of organizational monitoring (Oulasvirta et al., 2012; Salina & Saidin, 2019).

Finally, facilitating conditions had a weaker but significant effect on cyberloafing. The availability of resources, such as unrestricted internet access and a lack of monitoring, appears to create an enabling environment for cyberloafing. Although weaker than intention and habit, this result emphasizes the role of contextual and organizational structures, echoing prior findings that technological affordances influence workplace deviance (Weatherbee, 2010).

Overall, the results confirm that cyberloafing in Ethiopian higher education institutions is shaped by a complex interplay of cognitive evaluations (perceived consequences), affective states, social influences, habits, and contextual factors. Importantly, the findings highlight the need for organizational interventions that address not only individual attitudes but also social and environmental drivers of cyberloafing.

8. Conclusion and Implications

This study investigated the antecedents of cyberloafing among administrative employees in Ethiopian public higher education institutions using the TIB. The findings demonstrate that perceived consequences, affect, and social factors significantly shape employees' intentions to cyberloaf, while intention, habit, and facilitating conditions jointly explain actual cyberloafing behavior. Overall, the results confirm the suitability and explanatory strength of TIB in understanding workplace cyberloafing within a non-Western, public-sector context.

From a theoretical perspective, the study extends the application of TIB to higher education institutions in a developing country, reinforcing the importance of integrating cognitive, affective, social, and habitual components when explaining digital workplace behaviors. By empirically demonstrating the dual roles of intention and habit, the study advances theory by showing how cyberloafing evolves from deliberate choice to routinized behavior.

Practically, the findings offer important implications for university administrators and policymakers. Interventions aimed solely at monitoring or punishment are unlikely to be effective if they ignore emotional and social drivers. Instead, higher education institutions should promote clear and balanced internet-use policies, strengthen positive social norms through supervisory role modeling, and enhance job engagement to reduce reliance on cyberloafing as an emotional coping mechanism. Addressing habitual cyberloafing further requires consistent organizational practices rather than one-time policy enforcement.

At the policy level, the results highlight the need for context-sensitive digital governance frameworks that balance productivity, employee well-being, and ethical internet use. Such policies can support sustainable digital work environments while minimizing counterproductive technology use.

In sum, cyberloafing should not be viewed merely as employee misconduct but as a multifaceted behavioral phenomenon shaped by individual evaluations, emotions, social influence, habits, and contextual affordances. Understanding these drivers is essential for designing effective, evidence-based interventions in higher education and beyond.

9. Limitations and Future Research

A key limitation of this study is its reliance on self-reported data, which remains vulnerable to social desirability and recall bias despite procedural safeguards. Future research should strengthen methodological rigor by integrating objective behavioral measures, such as system logs or observed internet usage, with self-reports to enable data triangulation and improve measurement validity.

Second, the cross-sectional design limits causal inference and insight into changes over time. Longitudinal or experimental designs are recommended to capture the dynamic evolution of cyberloafing intentions, habits, and behaviors.

Third, the focus on administrative employees in public higher education institutions within a single context limits generalizability. Replication across different organizational settings and countries is needed to test the cross-context and cross-cultural applicability of the TIB.

Finally, Future research should extend the TIB by integrating the antecedents and consequences of cyberloafing within a unified model. Such work could examine how cyberloafing, affeted by individual and organizational factors, affects outcomes such as job performance, employee well-being, and team cohesion, while incorporating variables like personality traits (e.g., conscientiousness), work engagement, organizational justice, and leadership styles to enhance explanatory power.

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