

Fundamentals and Validation of a Measurement Scale for Assessment of Communication as a Segment of Cyberloafing

Marko Antić¹, Ana Globočnik Žunac², Nikša Sviličić³

¹University North, Koprivnica, Croatia

²University North, Department of Business Economics, Koprivnica, Croatia

³University North, Department of Communication, media and journalism, Koprivnica, Croatia

ABSTRACT

Evolution of advanced technological development has enabled connection between participants of the communication process at any time, regardless of their distance. This potential has become an integral part of private online activities carried out within the time of professional context (cyberloafing). Establishing communication activities as a distinctive component of online activities at the workplace has not been the subject of academic attention previously. The goal was to create and validate a measurement instrument that would specifically categorize communication activities of cyberloafing. The research was conducted as an anonymous online survey of 302 participants and structured in two segments: the participants' sociodemographic characteristics and their engagement in cyberloafing activities. Two confirmatory factor analyzes were conducted to identify the optimal model, resulting with three factors and six items. Based on the accumulated data, the proposed model meets the appropriateness criteria, and the new measuring instrument was evaluated as valid and reliable for use.

Key words: communication, cyberloafing, nurses, new instrument, validation

Introduction

With the development of technology, the Internet has become an integral part of every individual's life, whether it is used for private or business purposes¹. It can also be said that today's life has become unimaginable without the technology that is used for various purposes such as communication, searching information, entertainment and even making purchases². As the advancement of technology and the availability of the Internet have generally improved people's lives, it has also improved numerous business processes. However, when it comes to the use of the Internet in the workplace, a problem can arise in situations where employees access the Internet and perform various online activities that are not related to their work or work duties. Such behavior is called cyberloafing, and among the first to define such behavior was Lim in 2002, who states that cyberloafing represents any volunteer activity of employees that takes place using companies' Internet access during office hours to engage in private on-

line activities³. In the meantime, due to the process of digitalization, the Internet has become available anytime and anywhere. So, employees who today at their workplace perform private online activities do not only use the companies' Internet, but frequently access the Internet using their own data-enabled devices (e.g. smartphones or some other private devices)^{1,4}. The problem of cyberloafing is faced by all organizations, whether in the private or public sector, considering that the participation of employees in cyberloafing activities represents waste of time in a way that detracts employees from carrying out their main job duties³. In addition to time theft and productivity losses, organizations are also concerned with other consequences of cyberloafing, considering that such activities can sometimes be unsafe and even illegal⁴.

Research has established that the engagement of employees in cyberloafing activities is often related to different factors related to the work environment. For example, it was determined that there is a negative correlation between engagement in cyberloafing activities and job sat-

isfaction, which means that employees who are more satisfied with their job are less engaged in cyberloafing activities⁵. In addition to job satisfaction, one study showed that the perception of the assertive communication style of managers is negatively related to engagement in cyberloafing activities, which means that managers can contribute to the reduction of cyberloafing only through their communication with employees⁶. On the other hand, some negative factors related to the work environment can contribute to increased engagement in cyberloafing activities. For example, research showed that job stress, job demands (i.e. role ambiguity, role conflicts, work overload), after-hours electronic communication and psychological contract breach significantly increase cyberloafing behavior among employees⁷⁻¹¹. Also, research has shown that there is a significant positive correlation between engagement in cyberloafing activities and conflict, crowding, workplace ostracism and organizational justice^{10, 12-15}. In addition to the direct connection, in one research it was determined that cyberloafing moderated the relationships between verbal aggression exposure and job satisfaction, as well as verbal aggression exposure and turnover intention¹⁶. Besides the relationship between cyberloafing and factors related to the workplace environment, the consequences that cyberloafing can cause should not be ignored also. Cyberloafing can have an impact on mental health, meaning that it can cause fatigue and resource depletion¹⁷. Another research, conducted on a sample of middle-school students, showed that engagement in cyberloafing can affect their cognitive absorption levels¹⁸.

Based on all the above, it can be concluded that engagement in cyberloafing is connected to numerous factors related to working conditions, but also that such behavior leads to a decrease in work productivity, which can result in financial losses for the business of various organizations. Therefore, organizations and their management at all levels should be more engaged in eliminating potential factors associated with engagement in cyberloafing to avoid employee non-productivity and thereby reduce potential financial losses. However, apart from potential financial losses, participation in cyberloafing in certain systems can potentially represent a much bigger problem, especially if the health system is considered. Engagement in cyberloafing among nurses and other health workers can represent a distraction during the provision of health care and the consequences of distraction can result in increased opportunities for errors or number of missed care^{8,19}. Omissions and errors in the work of health workers who provide direct care to patients can directly or indirectly affect the health and even the life of users of health services. One of the reasons why employees generally engage in cyberloafing may be that they try to balance their private lives, sometimes using the time when they are at work⁹. It is not uncommon for nurses and some other healthcare workers to work in shifts (including night shifts and/or 24-hour shifts) while having a family and children at home at the same time. Therefore, nurses

sometimes cannot isolate their private lives from work obligations⁸.

Communication is an integral part of human life, and with the development of technology, it is possible for communication to take place even in the moments when the participants are physically separated. That communication is an integral part of cyberloafing activities is evident from the research that has been carried out so far. Cyberloafing activities related to communication are an integral part of used questionnaires, but in none of them activities related to communication are singled out as a separate dimension.

Until now, several different instruments for the research of cyberloafing activities have been developed and validated, and it should be noted that different typologies of cyberloafing activities are used in different studies. In 2002, Lim developed a questionnaire for examining cyberloafing and his typology was based on communication technology: email versus the Internet³. In this model, communication via e-mail is separated from other activities related to Internet search, but with the development of technology over the years, today there are also other forms of online communication that are not only related to e-mail. Even more, communication via e-mail today often takes place using various digital applications that are accessed via mobile phones or other devices. The next frequently used typology in research of cyberloafing activities is the one developed in 2008 by Blanchard and Henle, who believed that organizations should treat differently the different forms of cyberloafing activities that actually represent deviant behavior. Therefore, they developed a two-factor measuring instrument for examining cyberloafing activities that are divided into minor and serious²⁰. Blanchard and Henle based their typology on Robinson and Bennett's typology of cyberloafing, which was developed in 1995, and in which they state that such deviant behavior can be divided into two dimensions. In their model, they highlighted the division of cyberloafing activities into two dimensions, the first which refers to minor or serious cyberloafing and the second which refers to deviant behaviors that are harmful to individuals or that are harmful to organizations²¹. Thus, Blanchard and Henle, as well as Robinson and Bennett, also examine cyberloafing activities related to communication through their questionnaire, but only as an integral part of their model, which is divided into minor and serious cyberloafing activities. Blau, Yang and Ward-Cook developed their questionnaire for examining cyberloafing in 2006, and the questions they used were partly taken from Lim's questionnaire while one part of the questions was newly created. In their three-factor model, they divided cyberloafing activities into browsing related activities, non-work-related e-mail activities and interactive activities¹⁵. In this model, cyberloafing activities related to communication are represented in two different dimensions (e-mail and interaction) and therefore it cannot be said that this model singles out communication as an independent component. An example of another successfully validated scale

for examining cyberloafing activities was developed by Akbulut, Donmez and Dursun in 2017, and in their five-factor model cyberloafing activities are divided into sharing, shopping, real-time updating, accessing online content and gaming/gambling²². In this model, as well as in the model developed by Blau, Yang i Ward-Cook, cyberloafing activities related to communication are not singled out as one separate dimension but are divided between several other dimensions.

In addition to multidimensional models, some researchers have developed one-dimensional scales for examining cyberloafing in general. These models consist of a combination of different items taken from other, previously mentioned models. Cyberloafing activities related to communication are also an integral part of these models, but they are in the same category as other cyberloafing activities^{23,24}. From all the above, it is evident that different authors use different typology, so although cyberloafing activities related to communication are an integral part of all questionnaires, communication is not singled out as one separate component in any of the mentioned questionnaires. Therefore, the main goal of this research was to develop a new cyberloafing instrument in which communication will represent a special component of cyberloafing activities. In addition to the development of the new construct, another goal was to evaluate construct validity and reliability.

Materials and Methods

Participants

The target population of this research were nurses employed in different workplaces in Croatia. This research included 302 participants, of which 86.75% were women and 13.25% were men. The average age of the participants was 36.15, with the youngest participant being 20 and the oldest 62. Most of the participants, 74.83% of them, lived in the city area. When it comes to marital status and number of children, most of the participants were married (54.30%) and the largest number of participants had no children (38.74%). The distribution of participants according to sociodemographic characteristics is shown in Table 1.

Regarding the level of education, most of the participants, 44.04% of them have completed undergraduate nursing studies (bachelor's degree level). When it comes to work characteristics, most of the participants, 32.12% of them, were employed in hospital wards and the largest number of participants, 49.34% of them, were working in shifts that include working in night hours. Also, the largest number of participants, 73.18% of them, did not hold managerial functions at their workplace. The distribution of participants with regard to the level of education and work characteristics is shown in Table 2.

TABLE 1
DISTRIBUTION OF PARTICIPANTS ACCORDING TO
SOCIODEMOGRAPHIC CHARACTERISTICS

Variable		N (%)
Gender	Men	40 (13.25%)
	Women	262 (86.75%)
Place of residence	City	226 (74.83%)
	Countryside	76 (25.17%)
Marital status	Single	60 (19.87%)
	In a relationship	48 (15.89%)
	In an extramarital union	30 (9.93%)
	Married	164 (54.30%)
Number of children	0	117 (38.74%)
	1	57 (18.87%)
	2	91 (30.13%)
	3 or more	37 (12.25%)

TABLE 2
DISTRIBUTION OF PARTICIPANTS REGARDING THE
LEVEL OF EDUCATION AND WORK CHARACTERISTICS

Variable		N (%)
Level of education	High school	91 (30.13%)
	Bachelor's Degree	133 (44.04%)
	Master's Degree	70 (23.18%)
	Ph.D. and/or Postgraduate Degree	8 (2.65%)
Workplace	Primary Care	42 (13.91%)
	Polyclinic	30 (9.93%)
	Emergency Medicine	68 (22.52%)
	Hospital Ward	97 (32.12%)
	Intensive Care Unit	18 (5.96%)
	Institutions of the social system	7 (2.32%)
	Other	40 (13.25%)
Working hours	Regular working hours (1st and/or afternoon shift)	126 (41.72%)
	Working in shifts (working hours that include night shifts)	149 (49.34%)
	Regular working hours in combination with 24-hour shifts	19 (4.29%)
	Other	8 (2.65%)
Managerial function	Yes	81 (26.82%)
	No	221 (73.18%)

The number of years of work experience varied from 0 (meaning less than one) to 43, while the average number of years of work experience was 14.93.

Instrument

The research questionnaire was specially created for the purpose of this research and consists of an introductory part and two question parts. In the introductory part, the aim and method were briefly explained to participants, as well as that participation is anonymous and voluntary. In the first part of the questionnaire, the sociodemographic characteristics of the participants were examined, and the second part refers to the engagement in various forms of cyberloafing activities.

As it was mentioned in the introductory part, today's life is unimaginable without the Internet and people use technology on a daily basis for different purpose such as browsing information, entertainment, shopping and communication². Based on these activities, a new typology was established for the purpose of this research and a new four-factor construct was created to examine engagement in cyberloafing activities. Only one modification was made, and that is the one related to shopping, which was reshaped into cyberloafing activities related to private obligations. Thus, the new construct for examining cyberloafing activities had four factors or subscales that are browsing information's (BI), entertainment (ENT), private obligations (PO) and communication (COMM) (Table 3). The construct consisted of a total of 12 items, three of which referred to BI, four to ENT, two to PO and three to COMM. One part of the items was used from the existing scales (with or without modification)^{3,20}, while some items were newly created. Sample item on cyberloafing activities related to browsing information's include „Browsing general, sports and weather news“. Sample item on cyberloafing activities related to entertainment include „Visiting adult oriented (sexually explicit) sites“. Sample item on cyberloafing activities related to private obligations include „Shop online for personal goods“. Sample item on cyberloafing activities related to communication include „Communicating with family or friends using digital applications (including social media)“. Participants were asked to estimate how often they engage in each cyberloafing activity and their response were given on a five-point Likert scale from 1 („Never“) to 5 („Constantly“).

Conducting research and statistical methods

The survey was conducted online, by sharing a questionnaire on social networks, and the research was conducted during December 2023 and January 2024. The research was anonymous and voluntary, and participants could withdraw from filling out the questionnaire at any time.

Analyses were conducted using IBM SPSS Statistics 29.0. and IBM SPSS Amos 26 softwares. Construct validity was tested by conducting confirmatory factor analysis (CFA) using the maximum likelihood method. By performing a CFA, the results of the chi-square (χ^2), degrees of

freedom (df) and p-value were obtained. Beside that, the following model fit indices were used to evaluate the model: χ^2/df , normed fit index (NFI), relative fit index (RFI), incremental index of fit (IFI), Tucker-Lewis index (TLI), comparative fit index (CFI) and the root mean square error of approximation (RMSEA). In order to determine that the model fits well according to the mentioned parameters, certain criteria must be met. Gefen, Straub and Boudreau quoted Jöreskog and Sörbom in their article and state that χ^2 statistic should be insignificant because p-value above 0.05 in this case shows good model fit²⁵. The ratio of χ^2/df that is smaller than 2.0 is considered very good, while the ratio between 2.0 and 5.0 is considered acceptable. NFI, RFI, IFI, TLI and CFI values greater than 0.95 indicate superior fit, while for a good fitting model RMSEA value should be between 0.03 and 0.08^{26,27}. In addition to CFA, average variance extracted (AVE), composite reliability (CR) and Cronbach α coefficient were measured to determine the validity and reliability of the construct. In order to evaluate that the construct is valid and reliable, the AVE in all factors should ideally be equal or greater than 0.5 and the CR, as well as Cronbach α coefficient should be equal or greater than 0.7^{26,28}.

TABLE 3
CYBERLOAFING ITEMS

Browsing general, sports and weather news. (BI)
Browsing news related to lifestyle or showbiz. (BI)
Making online bank transfers (e.g. paying bills or sending money). (PO)
Shop online for personal goods. (PO)
Communicating with family or friends using digital applications (including social media). (COMM)
Reading and sending non-work-related e-mails. (COMM)

*BI – Browsing information's, PO – Private obligations, COMM – Communication

TABLE 4
STANDARDIZED FACTOR LOADINGS OF INITIAL FOUR-FACTOR

Item	BI	ENT	PO	COMM
BI1	0.696			
BI2	0.710			
BI3	0.378			
ENT1		0.567		
ENT2		0.430		
ENT3		0.704		
ENT4		0.573		
PO1			0.638	
PO2			0.899	
COMM1				0.704
COMM2				0.790
COMM3				0.436

Results

The CFA was conducted to examine the initial four-factor model and the result showed that the four-factor model does not fit well ($\chi^2=188.201$, $df=48$, $p=0.000$, $\chi^2/df=3.921$, $NFI=0.823$, $RFI=0.757$, $IFI=0.862$, $TLI=0.807$, $CFI=0.860$, $RMSEA=0.099$). Standardized loading factors (regression weights) varied from 0.378 (item BI3) to 0.899 (item PO) in this model and all of them are shown in Table 4.

All individual standardized factor loadings for construct validity should be at least 0.5 and preferably 0.7²⁶. Therefore, the criteria for factor loadings in this research was set at 0.6. In factor BI, the item BI3 did not meet the criteria, so it was excluded from further analysis. In factor ENT, only the item ENT3 did meet the criteria so it was decided to exclude the whole factor. In factor PO, both items had a loading at a satisfactory level as well as the first two items in factor COMM. Item COMM3 did not meet the criteria, so that item was also excluded from further analysis. By excluding one factor and other items that did not meet the criteria of factor loadings, a new three-factor model with six items was obtained. In the next step, the CFA was conducted on a three-factor model and the results showed that this model fits well ($\chi^2=11.605$, $df=6$, $p=0.071$, $\chi^2/df=1.934$, $NFI=0.981$, $RFI=0.954$, $IFI=0.977$, $TLI=0.977$, $CFI=0.991$, $RMSEA=0.056$).

In a three-factor model, the standardized factor loadings varied from 0.635 (item PO2) to 0.904 (item PO1) and to examine construct validity and reliability, besides the factor loadings, AVE and CR were measured. The AVE rating varied from 0.502 (BI) to 0.610 (PO), while CR values varied from 0.668 (BI) to 0.752 (PO). Results of standardized factor loadings, AVE and CR values are shown in Table 5.

Besides the CR, to determine the reliability of the construct, Cronbach α coefficient was calculated also. The construct produced a Cronbach α of 0.823 for the entire construct and a value of 0.667 for BI factor, 0.717 for PO factor and 0.730 for COMM factor.

TABLE 5
STANDARDIZED FACTOR LOADINGS, AVE AND CR
VALUES OF THREE-FACTOR MODEL

	BI	PO	COMM
BI1	0.727		
BI2	0.689		
PO1		0.904	
PO2		0.635	
COMM1			0.701
COMM2			0.827
AVE	0.502	0.610	0.588
CR	0.668	0.752	0.739

Discussion and Conclusion

The main goal of this research was to develop a new measuring instrument that will be used to examine engagement in cyberloafing activities, and in which communication will be singled out as a special component. Along with the development, another goal was to evaluate the construct validity and reliability. The measurements were carried out on a sample of nurses employed in Croatia.

Two CFAs were conducted with the aim of obtaining a suitable model. Ultimately, a three-factor model with a total of six items was obtained and the results of the CFA for this model were highly satisfactory. Moreover, all individual standardized factor loadings were 0.635 or higher. The AVE values were all above 0.5, while the CR value for the BI factor was 0.668, for COMM factor 0.739 and for PO factor 0.752. The Cronbach α had a value of 0.667 for BI factor, 0.717 for PO factor and 0.730 for COMM factor.

As it can be seen from the obtained results, the values of AVE are satisfactory for all factors in the construct, while in terms of CR and Cronbach α values, only the BI factor has a value lower than 0.7. However, it is not uncommon that the results of reliability tests have values that are less than 0.7, especially when it comes to short instruments, i.e. instruments with less than ten items. In such cases, the values of reliability can be quite small, such as 0.5²⁸. It should be considered that this is a short instrument with a total of six items, but also the fact that the reliability measures do not deviate too much from the initially set criterion of 0.7. Based on all the results in general, it can be concluded that this model fits very well, and that this instrument has satisfactory results of construct validity and reliability. Ultimately, it can be concluded that in this newly created instrument, activities related to communication (along with the other two groups of activities) are singled out as a special component, and that the goals of this research have been successfully achieved.

The research has some limitations. First of all, the results would be more relevant if the research was conducted on a larger number of participants. Secondly, the research was conducted on a specific subgroup of health workers, i.e. nurses, which automatically means that the sample in this research was predominantly female (86.75% of all participants were females). Finally, the three-factor model with six items in total represent a brief instrument for measuring cyberloafing activities. But contrary to the fact that brevity can be considered as a limitation, at the same time it can also be an advantage because it enables rapid assessment of cyberloafing among employees. In addition, filling out such a short questionnaire does not take much time for the participants and can also at the same time reduce participant boredom while participating in research²⁹.

Despite these limitations, this paper represents a scientific basis for further research. It is necessary to test

this model on a sample of other healthcare workers as well as other samples outside the healthcare system. Also, the obtained instrument can serve as a starting

point for further improvement of the model, primarily in terms of increasing the number of items and achieving better reliability of the construct.

REFERENCES

1. ÖZCAN HM, KOÇ U, Ege Academic Review, 23 (2023) 11. doi: 10.21121/eab.987487. — 2. MARTINČEVIĆ M, VRANIĆ A, Psihologijske teme, 28 (2019) 507. doi:10.31820/pt.28.3.3. — 3. LIM VK, Journal of Organizational Behavior, 23 (2002) 675. doi: 10.1002/job.161. — 4. MERCADO BK, GIORDANO C, DILCHERT S, Career Development International, 22 (2017) 546. doi:10.1108/CDI-08-2017-0142. — 5. UYSAL S, Acta Horti, 1258 (2019) 201. doi: 10.17660/ActaHorti.2019.1258.28. — 6. AGARWAL UA, Australasian Journal of Information Systems, 23 (2019) 1. doi:10.3127/ajis.v23i0.1759. — 7. SKEJA A, LORCU F, Relations of three phenomena: cyberloafing, creativity, and stress. In: KOPACEK P (Ed) 21st IFAC Conference on Technology, Culture and International Stability TECIS 2022: Prishtina, Kosovo, 2022. IFAC PapersOnline (Elsevier, Oxford, 2023). — 8. ALQAHTANI N, INNAB A, ALAMMAR K, ALKHATEEB R, KERARIA, ALHARBI M, International Journal of Nursing Practice, 28 (2022) 1. doi: 10.1111/ijn.13079. — 9. ELREHAIL H, REHMAN SU, CHAUDHRY NI, & ALZGHOUL A, Education and Information Technologies, 26 (2021) 4731. doi: 10.1007/s10639-021-10496-1. — 10. PARIYANTI E, ADAWIYAH WR, WULANDARI SZ, The Journal of Behavioral Science, 17 (2022) 90. — 11. ZHANG N, LIU X, LI J, XU Z, BMC Nursing, 22 (2023) 335. doi: 10.1186/s12912-023-01525-0. — 12. GIORDANO C, MERCADO BK, Psychology, 9 (2023) 1. doi: 10.1525/collabra.57391. — 13. ZOGHBI-MANRIQUE-DE-LARA P, SHARIFIATASHGAH M, Cognition, Technology & Work, 23 (2021) 331. doi: 10.1007/s10111-020-00627-y. — 14. HU Y, CHEN Y, YE M, Curr Psychol, 42, (2023) 3372. doi: 10.1007/s12144-021-01690-y. — 15. BLAU G, YANG Y, WARD-COOK K, Journal of allied health, 35 (2006) 9. — 16. ANDEL SA, KESSLER SR, PINDEK S, KLEINMAN G, SPECTOR PE, Computers in Human Behavior, 101 (2019) 124. doi: 10.1016/j.chb.2019.07.013. — 17. WU J, MEI W, LIU L, UGRIN JC, Journal of Business Research, 112 2020 56. doi: 10.1016/j.jbusres.2020.02.043. — 18. TANRIVERDI Ö, KARACA F, Addicta: The Turkish Journal on Addictions, 5 (2018) 285. doi: 10.15805/addicta.2018.5.2.0052. — 19. ROSS J, Journal of PeriAnesthesia Nursing, 33 (2018) 560. doi:10.1016/j.jopan.2018.05.003. — 20. BLANCHARD AL, HENLE CA, Computers in human behavior, 24 (2008) 1067. doi: 10.1016/j.chb.2007.03.008. — 21. ROBINSON SL, BENNETT RJ, Academy of management journal, 38 (1995) 555. — 22. AKBULUT Y, DÖNMEZ O, DURSUN ÖÖ, Computers in Human Behavior, 72 (2017) 87. doi: 10.1016/j.chb.2017.02.043. — 23. DERIN N, GÖKÇE SG, Procedia – Social and Behavioral Sciences, 235 (2016) 694. doi: 10.1016/j.sbspro.2016.11.070. — 24. LOWE-CALVERLEY E, GRIEVE R, Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 11 (2017). doi: 10.5817/CP2017-2-5. — 25. GEFEN D, STRAUB D, BOUDREAU MC, Communications of the association for information systems, 4 (2000) 7. doi: 10.17705/1CAIS.00407. — 26. HAIR JF, BLACK WC, BABIN BJ, ANDERSON RE, Multivariate Data Analysis: A Global Perspective, 7th ed. (Pearson Education, London, 2010). — 27. BYRNE BM, Structural equation modeling with AMOS: basic concepts, applications, and programming (multivariate applications series) (Taylor & Francis Group, New York, 2010). — 28. PALLANT J, SPSS Survival Manual, 6th ed. (Open University Press, London, 2016). doi: 10.4324/9781003117407. — 29. GOSLING SD, RENTFROW PJ, SWANN WB, Journal of Research in Personality, 37 (2003) 504. doi:10.1016/s0092-6566(03)00046-1.

M. Antić

University North, Trg dr. Žarka Dolinara 1, 48000 Koprivnica, Croatia

e-mail: marantic@unin.hr

OSNOVE I VALIDACIJA MJERNE SKALE ZA PROCJENU KOMUNIKACIJE KAO SEGMENTA PRIVATNIH ONLINE AKTIVNOSTI NA POSLU

SAŽETAK

Evolucija naprednog tehnološkog razvoja omogućila je povezanost sudionika komunikacijskog procesa u svakom trenutku, bez obzira na njihovu udaljenost. Taj je potencijal postao sastavni dio privatnih online aktivnosti koje se provode u vremenu profesionalnog konteksta (cyberloafing). Uspostavljanje komunikacijskih aktivnosti kao komponente online aktivnosti na radnom mjestu dosad nije bilo predmetom akademske pažnje. Cilj ove studije bio je stvoriti i validirati mjerni instrument koji bi specifično kategorizirao komunikacijske aktivnosti cyberloafinga. Istraživanje je provedeno kao anonimna online anketa od 302 sudionika i strukturirano u dva segmenta: sociodemografske karakteristike sudionika i njihov angažman u cyberloafing aktivnostima. Provedene su konfirmatorne dvije faktorske analize kako bi se identificirao optimalni model, što je rezultiralo s tri faktora i šest čestica. Na temelju prikupljenih podataka predloženi model zadovoljava kriterije prikladnosti, a novi mjerni instrument ocijenjen je valjanim i pouzdanim za uporabu.