

Does Cyberloafing reduce academic performance? A comparative study between Turkey and Poland

Meryem AYBAS^a, Abdullah Yiğit GÜNGÖR^b

Abstract

Organizations believe that cyberloafing should be managed on the grounds that it reduces performance and leads to inefficient working order. The cyberloafing means non-business use of Internet access and IT equipment by employees during their working hours. One hand Internet which is one of the most important invention of our era creates important opportunities for businesses, institutions and organizations to increase their efficiencies, on the other hand it brings some risks and disadvantages for these units. One of these disadvantages is cyberloafing which means usage of internet in working hours for non-work purposes. Meanwhile, the aim of the study is to determine the effect of cyberloafing on employee performance. In this context, the sample of the study is 209 in total and consists of 101 Polish and 108 Turkish academics. In this study, the prevalence and perceived seriousness of cyberloafing among Turkish and Polish academics were compared. Furthermore, the differences between the policies and regulations of internet use among the two countries were examined in the context of cyberloafing. When the results were evaluated, there was no relations between cyberloafing and employee performance for the two countries, but differences were found in the other variables examined. Thus, sufficient and weak sides of two countries has been tried to determine.

Keywords: Cyberloafing, Employee Performance, Cyberslacking, Human Resources, Counterproductive Work Behaviour, IT usage

JEL Classification: M12, M15, M50

Introduction

The use of technology, which is increasing day by day and continues to develop rapidly, responds to our needs and even markets itself through creating new needs, has become undeniable in our lives. In this context, this phenomenon, which is conceptualized as cyberloafing or cyberslacking in academic literature and which means the use of internet for non-work purposes in general terms; business life is increasing day by day and both the employee and the organization's effectiveness and efficiency is greatly threatened. Therefore, it is important to examine this problem, to take necessary measures and to minimize it as much as possible (Lim & Teo, 2005; Askew, 2012).

The fact that the working life is increasingly dependent on information technologies, especially the remote working forms that become more evident with Coronavirus outbreak make it necessary for organizations to regulate the

conditions of working in a virtual context. Showing sustainable performance in terms of mental, physiological, and psychological of individuals who work in a virtual environment and productive usage of time constitute prominent issues (Wu et al., 2020).

Examination of the relation between cyberloafing and performance in terms of different contexts and variables will contribute to job designs which provides productive usage of working time, constitution of working environment which preserve mental, physiological, and psychological health of employees for sustainable performance. The literature on cyberloafing and performance is slightly inconsistent (Santos et al., 2019: 4). Some studies have focused on the dark and negative effects of cyberloafing, while some have studied its healing and relaxing effects (Wu et al., 2020).

Therefore, this study aims to whether internet usage for non-work purposes (cyberloafing) which becomes as a reality has an effect on sustainable performance or not. When it's considered that digitalization becomes as a lifestyle, it's important to discuss which extent cyberloafing is harmful or

^a Department of Labor Economics and Industrial Relations, Kocaeli University, Kocaeli, Turkey

^b Department of Business Administration, Atatürk University, Erzurum, Turkey

Corresponding author: Abdullah Yiğit GÜNGÖR, yigit.gungor@atauni.edu.tr

useful in terms of required intervention techniques. Deficiency of comparative studies regarding the issue indicates a gap in the field. Deficiency of inter-cultural studies glitters (Ugrin et al., 2018). Indeed, Rajah and Lim (2011) express that inter-cultural comparative studies should be conducted related cyberloafing. Doty et al. (2020) indicate that inter-cultural studies which examines widespread effect of cyberloafing are insufficient. For this reason, a research in the context of Turkey-Poland has been conducted within this study.

This study aims to improve the research model of Lim and Teo (2005) by testing it at a level of countries (Turkey and Poland). Accordingly, the aims of the research are 1) to explore to what extent the performance of employees is affected by cyberloafing. 2) to compare the cyberloafing and employee's performance between Poland and Turkey, 3) to investigate any differences in cyberloafing and employee performance according to demographic characteristics (gender, age, and work experience).

The following sections are as follows. First of all, cyberloafing and performance literature are theoretically analyzed. Afterwards, hypotheses were proposed within the scope of the research model. Then the following sections include methodology, analysis and discussion. Finally, the limitations of the research, the results and recommendations for further research are presented.

1. Theoretical Framework

1.1. Cyberloafing

In terms of the theoretical framework, cyberloafing, which is a type of organizational deviance, can be considered as an insignificant deviance against production in the context of the typology of deviance in the workplace of Robinson and Bennett (Robinson & Bennett, 1995: 565; Prasad et al., 2010). Froom (1996) defines cyberloafing as wasting time on the Internet at work and states that this behavior leads to enormous productivity problems in companies providing internet access to employees. According to Friedman (2000), cyberloafing; during the working hours, using firm-business resources to visit adult and news sites, shopping, playing games, vacation plan, stock trading, chat, etc. use of non-business internet for such activities. Mills, Hu, Beldona, and Clay (2001) explain this concept as the so-called wasted time on the Internet, while Lim (2002) emphasizes that virtual slippage leads to instability in production, similar to Froom. She also

called this behavior the use of internet access by employees for personal purposes during working hours. The concept of internet used in the definition of cyberloafing is generally shown as the source of the enterprise. However, with the developing information technologies, almost everyone has personal internet access on their mobile phones. In this respect, it may be more appropriate to call cyberloafing as the activities of employees that they have made non-business activities on the internet with their personal or organizational internet and devices (mobile phone, personal laptop, tablet, etc.) during the working hours.

1.2. Cyberloafing and Employee's Performance

According to the result of the meta-analysis study carried out by Mercado et al.; although cyberloafing strongly correlated with overall counterproductive work behaviors, the findings suggest it is unrelated to other components of job performance (Mercado et al., 2017: 546).

Even though it's thought that there is an inverse correlation between the cyberloafing and performance, there are another view in the literature which moots that these notions may have positive correlation. In this context, the relationship between cyberloafing and performance is handled with four different perspectives. The first one suggests that cyberloafing decreases job performance due to waste of time. According to second perspective, some cyberloafing activities are more harmful than others. Third perspective asserts that cyberloafing activities provides rest for employees. Hence, when the employees continue their works, they focus on their tasks more and show more productive performance. According to the last perspective, cyberloafing doesn't affect performance except extraordinary and extreme situations (Askew, 2012: 19-20).

Anandarajan et al. (2004) determines four type of cyberloafing behavior. These are: 1) Disruptive cyberloafing; includes activities such as visiting adult web sites, playing games and downloading music which are harmful and cause loss of productivity. 2) Recreational cyberloafing; is determined as a minor cyberloafing and involves activities like searching activities for the weekend, looking for information about a product which is planned to purchase, and surfing the Internet purposelessly. 3) Personnel learning cyberloafing; contribute to organization indirectly by utilizing effectivity and efficiency of employees and decreasing their stress level. This type of

cyberloafing has indirect contribution for the organization and comprises activities such as looking for news about the organization and visiting professional institutions web sites. 4) Ambiguous cyberloafing; includes activities which may result in both positively and negatively. Activities of ambiguous cyberloafing are visiting governmental web sites, discussing in the chat rooms about their organization and looking for information about other organizations.

Lim and Teo (2005) classifies cyberloafing activities under browsing and e-mail dimensions. 1) Browsing activities are visiting “general news websites”, “entertainment-related websites”, “sports-related websites”, adult-oriented (sexually explicit) websites” instant messaging/chatting online (IRC), downloading non-work-related information, looking for employment, shopping online, and playing online games. 2) E-mail activities are “receiving non-work-related e-mail”, “checking non-work-related e-mail”, “and sending non-work-related e-mail”. E-mail activities are determined as minor cyberloafing activities which are frequent. On the other hand, the most frequent browsing activities are; downloading non-work-related information, visiting general news websites and entertainment-related websites respectively. Visiting adult-oriented websites and looking for employment are determined as major cyberloafing.

Blau et al. (2006) groups cyberloafing activities under three factors such as browsing-related cyberloafing, non-work-related cyberloafing, and interactive cyberloafing. While browsing-related and non-work-related cyberloafing activities cause a loss of time, interactive cyberloafing is the most powerless one. Powerlessness is explained as perception insufficiency of the employee to control his/her work environment. Interactive cyberloafing consists of “posting messages on non-work-related items”, “downloading non-work-related information”, “chatting with other people in online chat rooms”, and “playing online games”. In addition, their study provides a new cyberloafing activity which is called “moonlighting” and it means Internet usage for additional income.

Excessive cyberloafing causes loss of time and hence, productivity of the organization decreases. Second, another risk of cyberloafing is visited websites may contain viruses or spy programs. This situation may bring about capture, change, and abuse of organizational data base. Another negative result of cyberloafing is a lack of tie among employees because of spending spare time

with cyberloafing activities. This kind of situation decreases synergy and communication among employees. Thus, efficiency of the organization would decrease (Koay & Soh, 2018: 5). Also, Liberman et al. (2011), state that the employee job attitudes of job involvement and intrinsic involvement are negatively related to cyberloafing. Excessive intensity on the network connection and consequently, decrease in Internet speed is another detrimental result of the cyberloafing (Koay et al., 2017).

On the other hand, there are another ideas state that cyberloafing has also positive consequences such as decreasing stress level and prevent employees to be caught job burnout. In the same manner, employees might cyberloaf to refresh themselves and have an open mind (Khansa et al., 2018: 197-198). Another positive consequence of cyberloafing is developing new ideas and thoughts, enlarging perspective on life and vision (Koay & Soh, 2018: 5).

Accordingly; the main objective of this study is to examine the effect of cyberloafing on employee performance among Turkish and Polish Academics. Thus, the following hypotheses are put forward:

H1: There is a significant difference between prevalence of cyberloafing and employee performance among Turkey and Poland.

H2: There is a significant difference between perceived seriousness of cyberloafing and employee performance among Turkey and Poland

H3: Prevalence of cyberloafing has significant difference about in terms of countries.

H4: Perceived seriousness of cyberloafing has significant difference in terms of countries.

H5: Employee performance has significant difference in terms of countries.

H6: Regulation of Internet usage has significant difference in terms of countries.

H7: Disciplinary punishment related to Internet usage has significant difference in terms of countries.

H8: Justification of personal Internet usage at workplace has significant difference in terms of countries.

H9: Duration of Internet usage related to work at home has significant difference in terms of countries.

H10: Duration of Internet usage related to non-work activities at workplace has significant difference in terms of countries.

2. Materials and Methods

Survey method and questionnaire technique was

used to test research questions. Data was collected through paper-pencil and Internet.

2.1. Sample and Procedures

Academicians from Turkey and Poland were selected as the sample of the study. Poland is in demand country for students from Turkey within the context of ERASMUS+ (student exchange programme), there are other reasons such as having close population, GDP, and GDP per Capita to select these two countries for comparison (see Table 1).

Table1. The Comparisons of Turkey and Poland

	Turkey	Poland
GDP	771 Billion \$	585 Billion \$
Population	80 Million	38 Million
GDP per capita	9,370 \$	15,420 \$
University Ranking	947	1611
Performance score	303.74	189.48

Source: GDP: World Bank (2018), Population: Eurostat (2018), University ranking: URAP (2017-2018), performance score of the university: URAP (2017-2018)

Moreover, there are similarity in terms of cultural values between Turkey and Poland as seen Table 2. Hofstede ranges 6 dimensions of national culture from 0-100 and he determined 50 point as a mid-level. He indicates that related to each dimension, the value which is under 50 means LOW, while over 50 means HIGH. When the Table 2 is considered, it's seen that the values of "power distance" and "uncertainty avoidance" are so close to each other. While Turkey's power distance value is 66, Poland's value for the same dimension is 68 In terms of uncertainty avoidance value, Turkey has 85, Poland has 93 alike. For the other dimensions such as long-term orientation and indulgence, both countries fall within the same part like low long-term orientation and indulgence. Only, values of masculinity dimension rank as different side which means Turkey is called as feminine culture, when Poland is Masculine (<https://www.hofstede-insights.com>).

Table2. Cultural Dimensions for Nations (Turkey and Poland)

	Turkey	Poland
Power Distance	66	68
Individualism	37	60
Masculinity	45	64
Uncertainty Avoidance	85	93
Long Term Orientation	46	38
Indulgence	49	29

Source: <https://www.hofstede-insights.com>

Academic life has a big potential of digital learning and education. Generally having access to Internet and lack of supervision and restraint related to Internet usage at work are the reasons for selection of academics. One public university for each country has examined to test hypothesis of the research. Two faculties (faculty of law and faculty of economics and administrative sciences) for each university represents the sample of study (N; TR= 145, N; PL=135, Total N= 280). 209 academicians have participated to the research totally from 108 Ataturk University and 101 University of Zielona Gora.

Table 3. Demographic distribution of respondents (N=209)

Variables	Categories	f	%
Gender	Man	135	64,6
	Woman	72	34,4
Marital Status	Married	149	73,4
	Single	54	26,6
Title	Research Assistant	51	24,4
	Lecturer	3	1,4
	Prelector	5	2,4
	Assistant Professor	67	32,1
	Associate Professor	14	6,7
	Professor	42	20,1

1. 2.2. Measures

2. Cyberloafing scale developed by Lim and Teo (2005) was used to measure cyberloafing behavior which has four parts as prevalence of cyberloafing, perceived seriousness of cyberloafing, justification of cyberloafing, and regulation of cyberloafing. Prevalence of cyberloafing and perceived seriousness of cyberloafing are 6-Point Likert scales (from 0 to 5) and each have 13 items. Justification of cyberloafing has 6 items, while regulation of cyberloafing has 5.
3. Employee's Performance was measured with three item scale developed by Çöl (2008). This scale assessed respondents perceived academic performance. We used a composite score to test reliability for all scales. A Cronbach Alpha is computed to test if the items can be reliably combined into a composite score (Ugrin, Pearson & Nicle, 2018). The alpha value for the 12 items is .78, indicating the scale has reasonable reliability for use as a composite rating of participants' prevalence of Cyberloafing and the 12 items is .87 indicating

the scale has reasonable reliability for use as a composite rating of participants' seriousness of Cyberloafing. The composite score was then used to test the relationship between employee's performance and seriousness of cyberloafing and the relationships between employee's performance and prevalence of cyberloafing.

4. A coefficient alpha test was performed to examine the internal reliability, and all of variables were above the cut-off of 0.70 suggested by Nunnally (1978). Means, standard deviations, and correlations among the variables are provided in Table 4.

3. Results

The descriptive statistics are presented in Table 4. As it can be seen on the Table 4,

Table 4. Descriptive Statistics and Correlations Between Variables

	M	SD	1	2	3	4	5	6	7
1. Age	39,92	10,90	-						
2. Acceptableness of Cyberloafing Behavior	1,37	0,494	-0,103	-					
3. Internet Usage (Hour) at Home for Work Related Activities (Per week)	10,86	9,86	0,043	-0,005	-				
4. Internet Usage (Hour) at Work for Personal Activities (Per week)	4,48	7,77	-0,108	0,153*	0,165*	-			
5. Employee Performance	4,13	0,64	-0,062	0,036	-0,095	-0,063	.79		
6. Prevalence of Cyberloafing	1,10	0,71	-	0,195**	-0,031	0,227**	-	.78	
7. Seriousness of Cyberloafing	1,84	0,88	0,223**	0,091	0,163*	-0,028	-	0,101	.87
							0,014		

Note: The Cronbach's alpha coefficients are reported in diagonal.

** $p < 0.01$, * $p < 0.05$.

Arithmetic mean of perceived seriousness of cyberloafing is close to 2. That's why, it can be said that participants consider cyberloafing behaviors as non-serious. Table 4 shows that there is a significant relationship between "age" and "prevalence of cyberloafing" ($p < 0,01$). Pearson correlation value (r) among variables is -0,223 which means that the way of the relationship is moderately negative. Hence, it can be said that when the age becomes increased, prevalence of cyberloafing decreases.

There is also significant relationship between "justification of cyberloafing" and "duration of personal Internet usage at workplace" ($p < 0,05$). Pearson correlation value (r) among variables are 0,153 and the way of the relationship is positive. Justification of cyberloafing is coded as 1=Yes,

2=No, that's why it can be said that participants who says that cyberloafing is unacceptable makes more personal Internet usage at workplace. There is another significant relationship between "justification of cyberloafing" and "prevalence of cyberloafing" ($p < 0,01$). Pearson correlation value (r) is 0,195. That's why, the way of relationship is positive. When it's considered that the question related to justification of cyberloafing is coded as 1=Yes, 2=No, participants who says that cyberloafing is acceptable makes more frequent cyberloafing. There is a significant relationship between "duration of Internet usage related to work at home" and "duration of personal Internet usage at work" ($p < 0,05$). Pearson correlation value

among variables is 0,165 and the way of relationship is positive. In this context, it can be said that when duration of Internet usage related to work at home increases, duration of personal Internet usage at work raises.

Another significant relationship is between "duration of personal Internet usage at work" and "perceived seriousness of cyberloafing" ($p < 0,05$) and Pearson correlation value (r) is 0,163 among variables. Hence, the way of relationship is positive which means that participants who makes more frequent Internet usage related to work at home perceives cyberloafing more serious.

Lastly, there is also significant relationship between "personal Internet usage at work" and "prevalence of cyberloafing" ($p < 0,01$). Pearson correlation value (r) is 0,227 so the way of relationship is positive. Consequently, it can be said that when personal Internet usage increases, prevalence of cyberloafing rises too.

3.1. The Comparisons of Prevalence and Seriousness of Cyberloafing

As it can be seen on the Figure 1, white bars represent the arithmetic mean of prevalence of cyberloafing activities, while black bars show the arithmetic mean of perceived seriousness of cyberloafing activities. Non-serious cyberloafing activities are less harmful to organization than serious cyberloafing activities. Among these activities "visiting general news Web sites" is partially non-serious with 1,47 arithmetic mean which indicates that general news Web sites are visited almost once a day. "Visiting entertainment related Web sites" with 1,93 arithmetic mean indicates that participants describe this cyberloafing activity neither serious nor non-serious. In a similar way, arithmetic means related to perceived seriousness of cyberloafing associated with "sport related Web sites", "instant messaging/chatting online (IRC)", "downloading non-work related information", "looking for employment", "shopping online", "playing online games", and "visiting adult-oriented (sexually explicit) Web sites" are 1,81 – 1,94 – 2,13 – 1,75 – 2,04 – 2,38 respectively. This means that participants describe these cyberloafing neither serious nor non-serious. It can be said that participants are indecisive about perceived seriousness of these cyberloafing activities. On the other hand, arithmetic means of "checking personal e-mail", "receiving personal e-mail", and "sending personal e-mail related to perceived seriousness" are 1,38 – 1,38

– 1,33 respectively and this states that participants perceived these cyberloafing activities non-serious.

When it comes to prevalence of cyberloafing, "visiting entertainment-related Web sites", "visiting sports-related Web sites", "instant messaging/chatting online (IRC)", "downloading non-work related information", and "shopping online" are visited once a month with the following arithmetic means respectively; 1,02 – 0,76 – 1,47 – 0,68 – 0,73. On the other side, activities like "looking for employment", "playing online games", and "visiting adult-oriented (sexually explicit) Web sites" are almost not done with the following arithmetic means respectively; 0,17 – 0,22 – 0,14. "Checking personal e-mail" with 2,26 arithmetic mean and "sending personal e-mail" with 1,71 arithmetic mean show that these activities are done almost a few times in a week, while "receiving personal e-mail" is done once a month with 1,47 arithmetic mean.

Figure 2 shows comparative arithmetic means of Turkey and Poland associated with prevalence of cyberloafing activities. White bars represent Turkey, while blacks Poland. Arithmetic mean of "visiting general news Web sites" for Poland is 2,06, while it's 2,96 for Turkey. This situation means that Polish academicians visits general news Web sites a few times in a week, while Turkish academicians do the same cyberloafing activity once a day. Arithmetic mean of "visiting entertainment-related Web sites" for Turkey ($M=1,34$) is almost two times more than Poland ($M=0,68$). "Visiting sports-related Web sites" is the only cyberloafing activity which Poland (mean=0,86) is ahead of Turkey ($m=0,68$) associated with prevalence of cyberloafing. Polish academicians (mean=1,23) chats online (IRC) nearly a few times in a month, while Turkish ones (1,69) do the same cyberloafing activity almost a few times in a week. The arithmetic means of Turkey (0,69) and Poland (0,68) associated with "downloading non-work-related information" are very close. Academicians from Turkey and Poland almost do this cyberloafing activity a few times in a month. The arithmetic means for "looking for employment" is low for both countries and it's almost never done. However, it should be indicated that arithmetic means of Turkey (0,24) is almost 2,5 times more than Poland (0,10). Arithmetic means for Poland and Turkey are 0,60 and 0,84 respectively. Prevalence of "playing online games" is very low for both countries with 0,17 arithmetic mean for Poland and 0,27 for Turkey. Arithmetic means for

“visiting adult-oriented Web sites” for each country is same with 0,14. Hence, it can be said that both of them almost never done this type of cyberloafing activity. While Polish academicians (mean=1,88) roughly check their personal e-mail once a week, Turkish academicians (2,61) check

it once a day. Arithmetic means for “receiving personal e-mail” are so close with 1,42 for Poland and 1,50 for Turkey. Lastly, Poland has 1,47 arithmetic mean associated with “sending personal e-mail”, while has 1,93.

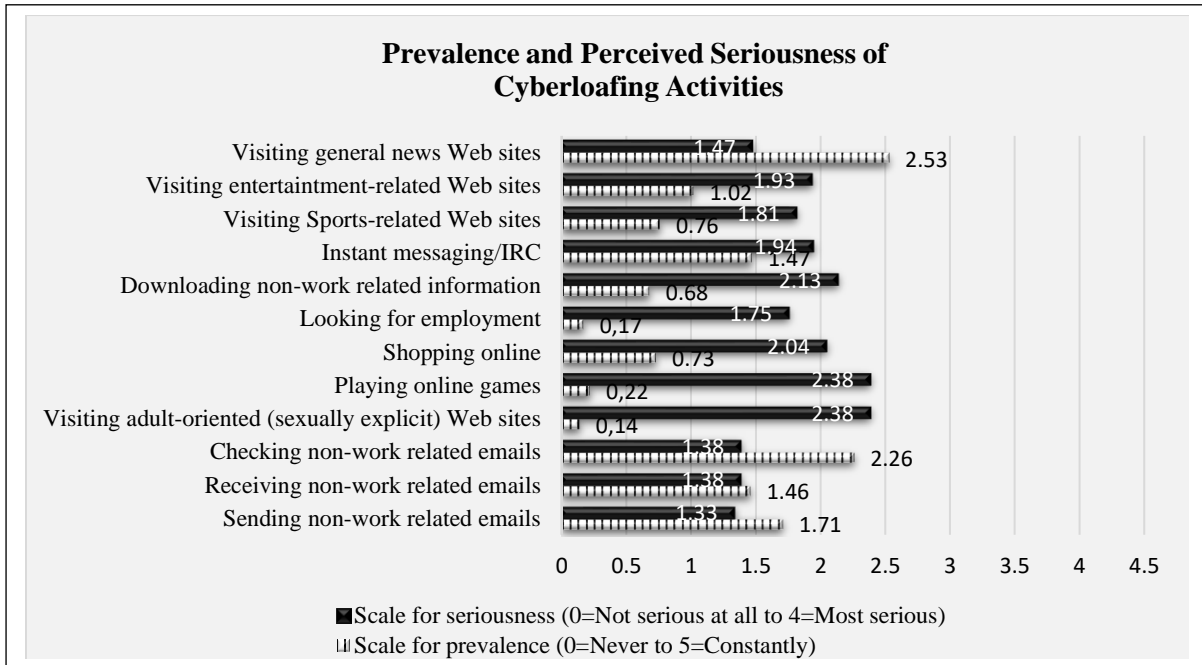


Figure 1: Prevalence and Perceived Seriousness of Cyberloafing Activities

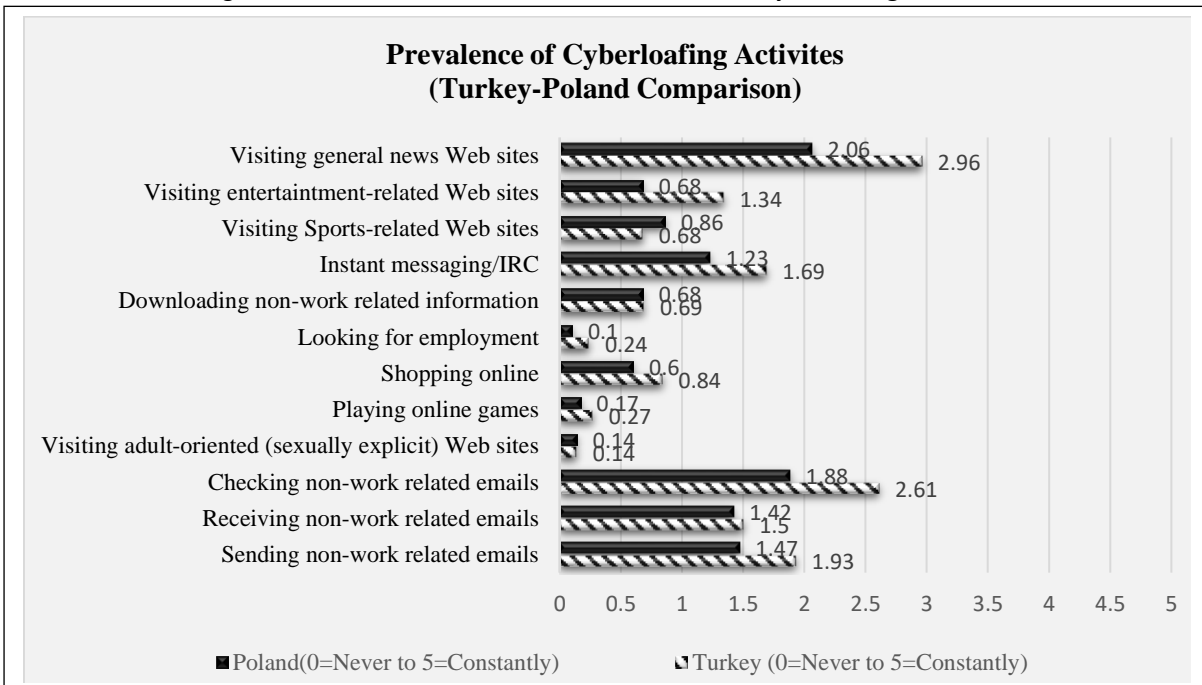


Figure 2. Prevalence of Cyberloafing (Turkey-Poland Comparison)

3.2. Hypothesis Testing

In order to verify the differences depending on samples’ common characteristics, t-test and oneway analysis of variance (ANOVA) were

implemented. A correlation analysis was also conducted to verify the relationship among variables.

3.2.1 The effects of prevalence of cyberloafing and perceived seriousness of cyberloafing on employee performance

As it can be seen from the Table 4, significance value (p) is 0,153 as a result of bivariate correlation analysis. There is not significant relationship between “prevalence of cyberloafing” and “employee performance” because the p value is less than 0,05. That’s why, H1 is rejected. When this result is considered, it can be said that it’s similar with the research findings of İnce and Gül (2011), Askew (2012), Mercado, Giordano and Dilchert (2017), Gülduran (2018), and Gülümoğlu (2018).

In the similar vein, Table 4 shows that significance value (p) is 0,845 between “perceived seriousness of cyberloafing” and “employee performance”. P value less than 0,05 means that there is not significant relationship between these variables so H2 is also rejected.

In the light of these results (rejection of H1 and H2), detailed information is tried to be obtained by

Table 5. Independent T-Test Results (H₃, H₄, H₅)

	Country	N	Mean	Sd	T	p
Employee Performance	Turkey	108	4,22	0,59	2,160	0,032
	Poland	101	4,03	0,69		
Prevalence of Cyberloafing	Turkey	107	1,25	0,65	3,155	0,002
	Poland	96	0,94	0,74		
Perceived Seriousness of Cyberloafing	Turkey	108	1,69	0,78	-2,737	0,007
	Poland	95	2,02	0,95		

Arithmetic mean of perceived seriousness of cyberloafing for academicians who works in Turkey is 1,69, while it’s 2,02 who works in Poland. It shows that academicians from Poland considers cyberloafing as more serious behavior. As it can be seen on Table 5, there is a significant difference between Turkey and Poland as a result of independent group t-test (p=0,002). Thus, H4 is supported.

Lastly, arithmetic mean of employee performance of academicians who works in Turkey is 4,22, while it’s 4,03 who works in Poland. Table 5 shows that there is a significant difference between Turkey and Poland as a result of independent group t-test (p=0,007). Thus, H5 is also supported.

Table 6. “Does your organization have policies regarding the use of Internet?”

	Responses	Country		Total	X ²	sd.	p
		Turkey	Poland				
Does your organization have policies regarding the use of Internet?	Yes (N)	44	12	56	25,969	2	0,000
	No (N)	13	32	45			
	Don’t know (N)	51	54	105			
Total		108	98	206			

using t-test and one-way ANOVA analyses instead of moderated multiple regression analysis to compare Turkey with Poland.

3.2.2. Employee Performance, Prevalence and Perceived Seriousness of Cyberloafing, in Turkey and Poland

Arithmetic mean related with prevalence of cyberloafing for academicians who work in Turkey is 1,25, while it’s 0,94 who work in Poland. As it can be inferred from Table 5, there is a significant difference between Turkey and Poland as a result of independent sample t-test (p=0,032). Thus, H3 is supported. Lacking of shift concept for academicians could be affected the result of study. In fact, Fındıklı (2016) found significant differences between health and textile industry and showed that cyberloafing should be examined comprehensively in terms of nature of business. For instance, in businesses where innovation and creativity are stand out, cyberloafing might result in differently in comparison with other businesses.

3.2.3. The existence of internet policy of the organization

The chi-square test of independence was used to test whether there is a significant difference between Turkey and Poland related to expression of “does your organization have policies regarding the use of Internet” or not. As a result of the analysis, existence and awareness of Internet usage have significant difference in terms of institutions from Turkey and Poland (p=0.000). Table 6 shows that there are 56 participants who said “my organization have Internet policy, while 45 participants said “my organization doesn’t have Internet policy”. In addition, 105 participants indicated that they have no idea whether their organizations have Internet policies or not. Thus, H₆ is supported.

3.2.4. The existence of disciplinary regulation related to internet use of the organization

The chi-square test of independence was used to test whether there is a significant difference between Turkey and Poland related to expression of “do you know anyone, professionally or otherwise, who had been disciplined due to non-work-related Internet usage at the workplace?” or

not. The analysis shows that there is a significant difference between Turkey and Poland in terms of knowledge about disciplinary regulations ($p=0,011$). Table 7 shows that 9 participants said “yes”, while 197 said “no”. Among 108 participants from Turkey; just 1 academician said “yes”, while among 98 participants from Poland; 8 academicians said “yes”. Thus, H7 is supported.

Table 7. “Do you know anyone, professionally or otherwise, who had been disciplined due to non-work-related usage at the workplace?”

	Responses	Country		Total	X ²	sd.	p
		Turkey	Poland				
Do you know anyone, professionally or otherwise, who had been disciplined due to non-work-related usage at the workplace?	Yes (N)	1	8	9	6,441	1	0,011
	No (N)	107	90	197			
Total		108	98	206			

3.2.5. The acceptableness of use the organization’s Internet access for non-work purposes during working hours at the workplace

The chi-square test of independence was used to test whether there is a significant difference between Turkey and Poland related to expression of “do you think it’s acceptable to use organization’s Internet access for non-work purposes (personal) during working hours at the

workplace?” or not. The analysis shows that there is a significant difference between Turkey and Poland in terms of acceptableness of Internet access for non-work purposes ($p=0,006$). As it be seen on Table 8, 128 respondents answered “yes”, while 77 respondents “no”. Among 108 respondents from Turkey; 58 respondents answered “yes”, while among 97 respondents from Poland; 70 respondents answered “yes”. Thus, H8 is supported (see Table 8).

Table 8. “Do you think it is acceptable to use the organization’s Internet access for non-work purposes during working hours at the workplace?”

	Responses	Country		Total	X ²	sd.	p
		Turkey	Poland				
Do you think it is acceptable to use the organization’s Internet access for non-work purposes during working hours at the workplace?	Yes (N)	58	70	128	7,426	1	0,006
	No (N)	50	27	77			
Total		108	97	205			

Moreover, open-ended questions were posed to participants about the reasons of non-work purposes Internet usage at the workplace. Participants who said “yes, it’s acceptable”, gave the following opinions:

- Non-work purposes Internet usage at work can be done, as long as specific limits are not exceeded.
- Non-work purposes Internet usage at work can be done, as long as specific it’s not used for immoral things.
- Non-work purposes Internet usage at work can be done, when it’s needed.
- Non-work purposes Internet usage at work can be done, as long as the responsibilities of work are not hindered.

– Non-work purposes Internet usage at work can be done due to the motivational effect of listening music.

– Non-work purposes Internet usage at work can be done to have a break for intense shift.

On the other hand, participants who indicated that non-work purposes Internet usage at the workplace is not acceptable gave the following opinions:

- Non-work purposes Internet usage at work shouldn’t be done because it causes decrease in Internet speed.
- Non-work purposes Internet usage at work shouldn’t be done because it’s unethical.
- Non-work purposes Internet usage at work shouldn’t be done because it causes waste of time.

3.2.6. Prevalence of Internet Usage at Home for Work-Related Activities and at Work for Personal Activities

The chi-square test of independence was used to test whether there is a significant difference between Turkey and Poland in terms of Internet usage for work-related activities at home ($p=0,001$). Arithmetic mean of "Duration of Internet Usage for Work-Related Activities at Home" for Poland is 13,18, while it's 8,62 hours for Turkey.

The chi-square test of independence was used

to test whether there is a significant difference between Turkey and Poland in terms of Internet usage for personal activities at the work. ($p=0,024$). Arithmetic mean of "Duration of Internet Usage for Personal Activities at Work" for Poland is 3,19, while it's 5,67 hours for Turkey. According to this, Turkish academics use the internet for more personal purposes in the workplace than Polish academics. Whereas; the use of internet for work purposes at home is higher among Polish academics than Turkish academics. Thus, H_9 and H_{10} is also supported (see Table 9).

Table 9. Prevalence of Internet Usage at Home for Work-Related Activities and at Work for Personal Activities

	Country	N	Mean	SD	T	p
Duration of Internet Usage for Work-Related Activities at Home (Hour)	Turkey	101	8,62	8,17	3,330	0,001
	Poland	97	13,18	10,93		
Duration of Internet Usage for Personal Activities at Work (Hour)	Turkey	104	5,67	9,84	2,270	0,024
	Poland	95	3,19	4,22		

4. Discussion

Starting point of the study is whether prevalence and perceived seriousness of cyberloafing have significant effect on employee performance or not. However, research findings show that there are not any significant effects of prevalence and perceived seriousness of cyberloafing on employee performance. This result supports other studies in the literature (Askew 2012, Mercado et al., 2017, Gülduran, 2018, Gülümoğlu, 2018). Examinations of cyberloafing and employee performance through comparison of two countries give different point of views to the literature. Result of the study is consistent with other studies which found that there is not significant relationship between cyberloafing and employee performance.

Lack of positive or negative effect of cyberloafing on employee performance might be explained with the adoption of individuals for working virtually and regulate themselves according to this. When the study of Lim and Teo (2005) is considered, it's seen that %88 of employees perceives cybeloafing as an acceptable behavior. They indicate that short-time cyberloafing wouldn't cause a problem and it could be thought as a break time to refresh themselves. They define amount of short-time cyberloafing as maximum 32 minutes. Another finding is that participants who have Internet access at home use Internet for work-related purposes at home for 4,5 hours per week. On the other hand, they make cyberloafing for 3,2 hours per week. When this study which was done in 2005

related to cyberloafing is compared with today's working conditions, more proliferation and justification of cyberloafing can be expected today due to the prevalence of telecommuting and development of Internet infrastructure.

Besides, organizational injustice is an important reason of cyberloafing. As Lim and Teo (2005) stated in their study, employees tend to cyberloaf when they think that they get lower salary than they deserved and their superiors behave them unrighteously. %89 of participants evaluates cyberloafing as an acceptable behavior when they are victimized, while the rate is %95 for the reason of getting lower salary than deserved. Therefore, cyberloafing is not just due to the virtual environment, it might be occurred because of other reasons such as organizational justice and HRM policies.

Koah and Soy (2018) indicated that excessive cybeloafing causes waste of time for organizations and it decreases the productivity of them. On the other hand, Keklik et al. (2015) investigated the effect of cyberloafing behaviors on organizational learning capacity. They expressed that serious (major) cyberloafing activities have significant and positive effect on learning capacity derived from participative decision making and interaction with external environment. Hence, a new idea is suggested that cyberloafing might also have positive consequences alongside their negative effects.

Lim and Chen (2012) found that men tend to make more cyberloafing than women. Duration of cyberloafing for men is 61 minutes per day, while

it's 46 minutes for women. %97 of men and %85 women are agreed about the idea of cyberloafing is acceptable. Men indicated that cyberloafing has positive effects in comparison with women. Another result is that effects browsing activities were evaluated positively, while effects of e-mail negatively.

Örücü and Yıldız (2014) investigates the cyberloafing behavior in terms of demographic characteristics. The sample of the study consists of academic and non-academic university employees. Demographic characteristics which has significant relationship with cyberloafing are as the following. Tendency to cyberloafing of single employees are higher than married. Prevalence of cyberloafing of academic employees are more than non-academics. Young participants have more tendency to make cyberloafing. When education level increases, nonserious cyberloafing rises. Participants who has higher income level make more nonserious cyberloafing and participants who has lower income levels make more serious cyberloafing. However, this study is just based on academic employees and there are not any significant differences among demographic characteristics such as age, marital status, gender, and title.

The arithmetic mean of prevalence of cyberloafing in Turkey is 1,25, while it's 0,94 in Poland. It means that there are more cyberloafing behaviors are shown in Turkey in comparison with Poland. Differences among countries such as professionalism and shift time perception, addiction to Internet might result in this arithmetic means. In addition, Ugrin et al. (2018) selected one university from ABD and Singapore as their sample. They investigated the relationship between nationalities of master students and prevalence of their cyberloafing behaviors. As a result of the analyses, there are significant relationships between nations and prevalence of cyberloafing. These results also support our hypotheses which asserts significant differences between Turkey and Poland.

Arithmetic means of perceived seriousness of cyberloafing for Turkey is 1,69, while it's 2,02 for Poland. This means that academicians in Poland consider cyberloafing more serious than academicians in Turkey. Therefore, higher prevalence of cyberloafing from academicians in Turkey might be called as a natural situation. Another finding is that the most serious cyberloafing activities for both Turkey and Poland are "visiting adult-oriented (sexually explicit) Web sites" and "playing online games" which is similar

to study of Lim and Teo (2005). The difference is that in the study of Lim and Teo (2005) "visiting adult-oriented (sexually explicit) Web sites" is the most serious and "playing online games" is the second, while perceived seriousness of these two cyberloafing activities have the same seriousness in our study.

Employee performance is ranged from 1 to 5 and arithmetic mean for Turkey is 4,22, while it's 4,03 for Poland. Academicians in Turkey make more cyberloafing, they have lower perceived seriousness for cyberloafing and have higher employee performance. Evaluation of employee performance with a self-reported scale might be a reason of this situation.

The percentages of answers for the question of "does your organization have policies regarding the use of Internet?" is like %41 "yes", %12 "no", and %47 "I don't know" in Turkey. The percentages are %12, %33, and %55 in Poland respectively. These rates show that policies of organizations are not announced sufficiently for both countries and this might cause for cyberloafing behavior for academicians by making their own assumption regarding to Internet policies.

While the issue about existence of Internet policy is mainly ambiguous, the answers for the question of "do you know anyone, professionally or otherwise, who had been disciplined due to non-work-related usage at the workplace?" are differentiated for Turkey and Poland. %1 of participants in Turkey knows someone who had been disciplined due to cyberloafing while this rate is %8 in Poland. Therefore, it can be said that disciplinary penalties are more firm in Poland than Turkey.

%54 of participants in Turkey evaluates cyberloafing as an acceptable behavior, the rate for Poland is %72. Although academicians in Turkey consider cyberloafing less acceptable, their prevalence of cyberloafing are higher. Contrary, even if academicians in Poland consider cyberloafing more acceptable, they make less cyberloafing behavior.

Academicians in Turkey use Internet for work-related purposes at home 8,5 hours per week, while academicians in Poland 13 hours. Perception regarding to shift time of academicians in Poland might be a reason of this situation. Academicians in Turkey make 5,5 hours Internet usage at work for personal purposes, while academicians in Poland make 3 hours approximately. This result verifies that academicians in Turkey makes more cyberloafing. As a consequently, when it's

considered that academics in Turkey make more cyberloafing, perceive cyberloafing less serious, and rate themselves with higher performance, they should be raised awareness regarding cyberloafing by management. Moreover, institutions should create Internet policies or if they already have it, they should make required enlightenment about it and supervise their policies. Hence, the prevalence of cyberloafing might decrease and short-time cyberloafing may affect employees in a positive manner.

Conclusions

Although cyberloafing is considered as a behavior which has negative effects in the beginning, there is another idea has come up in recent years which assert that it might be positive effects too. In this context, it's important to focus on both negative and positive consequences of cyberloafing (Abdullahi et al., 2019: 121). This approach might make different contributions the literature regarding cyberloafing.

Working and resting virtually are one of the most prominent much-debated issues in today's work environment. Examination of relationship of cyberloafing with performance in a different contexts and variables can be important to design of efficient and effective work systems for sustainable employee performance with working conditions which protects mental, physiological, and psychological health of them. In this study, the effect of cyberloafing on employee performance is examined in the context of the sample from academicians in Turkey and Poland. Research findings show that there is not significant relationship between these two variables. Afterwards some concepts such as Internet usage, the prevalence of cyberloafing, perceived seriousness of cyberloafing, and employee performance are examined as a comparison between Turkey and Poland. As a result, these concepts have significant differences among countries. Examination of cyberloafing in a comparative way contributes literature.

For the future studies, mediator or moderator roles of HRM strategies can be investigated in terms of the relationship between cyberloafing and performance. Especially, when telecommuting (distant-working) types become common, how monitoring and control affect cyberloafing and performance within the frame of Effort-Recovery Modal. Usage of self-reported scales regarding cyberloafing and performance might be the reason for lack of relationship between cyberloafing and performance. Cross-

sectional design and measurement techniques which are based on perception are mainly limitations for studies regarding performance. Therefore, longitudinal designs can give more appropriate results. We suggest that development of a system which can control and monitor Internet usage of employees from a center and studies based on these system's data might be more effective. Another contribution might be development of scales which is not self-reported and measure performance more appropriate.

References

- [1] Abdullahi, A. S., Mohammed, A., & Otori, Y. A. (2019). "Cyberloafing, Innovative Work Behaviour and Employee's Performance Among Deposit Money Banks in Kaduna, Nigeria". *Ilorin Journal of Human Resource Management*, 3(1), 120-135.
- [2] Anandarajan, M., Devine, P., & Simmers, C. "A Multidimensional Sealing Approach to Personal Web Usage in the Workplace". Murugan Anandarajan and Claire A. Simmers (Ed.). *Personal Web Usage in the Workplace: A Guide to Effective Human Resources Management* (s.61-78). London: Information Science Publishing.
- [3] Askew, K. (2012). *The Relationship Between Cyberloafing and Task Performance and An Examination of the Theory of Planned Behavior As A Model of Cyberloafing*. University of South Florida, Doctorate of Philosophy, South Florida.
- [4] Blau, G., Yang, Y., & Ward-Cook, K. (2006). "Testing a Measure of Cyberloafing". *Journal of Allied Health*, 35(1): 9-17.
- [5] Çöl, G. (2011). "Algılanan Güçlendirmenin İşgören Performansı Üzerine Etkileri". *Doğuş Üniversitesi Dergisi*, 9(1): 35-46. <https://doi.org/10.31671/dogus.2019.220>
- [6] Doty, D. H., Wooldridge, B. R., Astakhova, M., Fagan, M. H., Marinina, M. G., Caldas, M. P., & Tunçalp, D. (2020). Passion as an excuse to procrastinate: A cross-cultural examination of the relationships between Obsessive Internet passion and procrastination. *Computers in Human Behavior*, 102, 103-111.
- [7] Friedman, W. H. (2000). "Is the Answer to Internet Addiction Internet Interdiction?". H. M. Chung (Ed.). *AMCIS 2000: Proceedings of the 2000 Americas Conference on Information Systems*.
- [8] Froom, J. E., (1996). "Web-Filtering Products for Businesses -- Vendors Offer Solutions to Help Corporations Monitor Employee 'Cyberloafing'". *Communications Week*, IA.10.

- [9] Gülduran, Ç. A. (2018). Beş Büyük Kişilik Özelliğinin Sanal Kaytarma Davranışı ve İş Performansı Üzerindeki Etkisi: Otel İşletmelerinde Bir Araştırma. Nevşehir Hacı Bektaş Veli Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Nevşehir.
- [10] Gülümoğlu, G. (2018). Sanal Kaytarma ile Çalışan Performansı Arasındaki İlişki: Kastamonu İli Örneği. Kastamonu Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, Kastamonu.
- [11] İnce, M., & Gül, H. (2011). The Relation of Cyber Slacking Behaviors with Various Organizational Outputs: Example of Karamanoğlu Mehmetbey University. *European Journal of Scientific Research*, 52(4): 507-527.
- [12] Keklik, B., Kiliç, R., Yıldız, H., & Yıldız, B. (2015). "Sanal Kaytarma Davranışlarının Örgütsel Öğrenme Kapasitesi Üzerindeki Etkisinin İncelenmesi". *Business and Economics Research Journal*, 6(3): 129-144.
- [13] Khansa, L., Barkhi, R., Ray, S., & Davis, Z. (2018). "Cyberloafing in The Workplace: Mitigation Tactics and Their Impact on Individuals' Behavior. *Information Technology and Management*, 19(4): 197-215. <https://doi.org/10.1007/s10799-017-0280-1>
- [14] Koay, K. Y., & Soh, P. C. H. (2018). "Should cyberloafing be allowed in the workplace?". *Human Resource Management International Digest*, 26(7), 4-6. <https://doi.org/10.1108/hrmid-05-2018-0107>
- [15] Koay, K. Y., Soh, P. C. H., & Chew, K. W. (2017). "Antecedents and Consequences of Cyberloafing: Evidence From the Malaysian ICT Industry". *First Monday*, 22(3). <https://doi.org/10.5210/fm.v22i3.7302>
- [16] Liberman, B., Seidman, G., Mckenna, K. Y., & Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human behavior*, 27(6), 2192-2199. <https://doi.org/10.1016/j.chb.2011.06.015>
- [17] Lim V. K. G., (2002). "The IT Way of Loafing on the Job: Cyberloafing, Neutralizing and Organizational Justice". *Journal of Organizational Behavior*, 23(5): 675-694. doi:10.1002/job.161
- [18] Lim, V. K. G., & Chen, D. J. Q. (2012). "Cyberloafing at the Workplace: Gain or Drain on Work?". *Behaviour & Information Technology*, 31(4): 343-353. doi:10.1080/01449290903353054
- [19] Lim, V. K. G., & Teo, T. S. H. (2005). "Prevalence, Perceived Seriousness, Justification and Regulation of Cyberloafing in Singapore: An Exploratory Study". *Information and Management*, 42(8): 1081-1093. doi:10.1016/j.im.2004.12.002
- [20] Mercado, B. K., Giordano, C., & Dilchert, S. (2017). "A Meta-Analytic Investigation of Cyberloafing". *Career Development International*, 22(5): 546-564. doi:10.1108/CDI-08-2017-0142
- [21] Mills, J. E., Hu, B., Beldona, S., & Clay, J. (2001). "Cyberslacking: A Liability Issue for Wired Workplaces". *Cornell Hotel and Restaurant Administration Quarterly*, 42(5): 34-47. doi:10.1177/0010880401425004
- [22] Örucü, E. & Yıldız, H. (2014). "İşyerinde Kişisel İnternet ve Teknoloji Kullanımı: Sanal Kaytarma". *Ege Akademik Bakış*, 14(1): 99-114. <https://doi.org/10.21121/eab.2014118071>
- [23] Prasad, S., Lim, V. K., & Chen, D. J. (2010). Self-Regulation, Individual Characteristics and Cyberloafing. In PACIS (p. 159).
- [24] Rajah, R., & Lim, V. K. (2011). Cyberloafing, Neutralization, And Organizational Citizenship Behavior. In PACIS, p. 152.
- [25] Robinson, S. L., & Bennett, R. J. (1995). "A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study". *The Academy of Management Journal*, 38(2): 555-572. doi:10.2307/256693
- [26] Ugrin, J. C., Pearson, J. M., & Nickle, S. M. (2018). An examination of the relationship between culture and cyberloafing using the hofstede model. *Journal of Internet Commerce*, 17(1), 46-63. <https://doi.org/10.1080/15332861.2018.1424395>
- [27] Wu, J., Mei, W., Liu, L., & Ugrin, J. C. (2020). The bright and dark sides of social cyberloafing: Effects on employee mental health in China. *Journal of Business Research*, 112, 56-64. <https://doi.org/10.1016/j.jbusres.2020.02.043> https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_gind&lang=en 20.04.2020 <https://databank.worldbank.org/reports.aspx?source=2&series=NY.GDP.MKTP.CD&country=WL> 20.04.2020 <https://www.hofstede-insights.com/product/compare-countries/> 20.04.2020 <https://www.urapcenter.org/cdn/storage/PDFs/vhKaHMN3xHTJiFjNT/original/vhKaHMN3xHTJiFjNT.pdf> 20.04.2020