

# INVESTIGATING THE RELATIONSHIP BETWEEN CYBER LOAFING AND JOB PERFORMANCE IN AYANDEH BANK BRANCHES OF GUILAN, MAZANDARAN AND GOLESTAN PROVINCES, IRAN

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Abstract. Statistical population of the present research consists of the Ayandeh bank employees. The ACHIEVE model (Hersi & Goldsmith 2014) standard questionnaire and a cyber-loafing questionnaire was used to collect data. In order to check the normality of data, the Kolmogorov- Smirnov test was used. And also the confirmatory factor analysis was used in order to evaluate the questions of the questionnaire, and structural equation modeling was used to investigate the hypothesis of the research. The results indicated that there is a significant relationship between the employees' attitude to cyberloafing and job performance, the perceived cyberloafing barriers and the job performance and the descriptive norms of cyberloafing and job performance in Ayandeh Bank Branches.

Keywords: Cyber Loafing, Job Performance, Ayandeh Bank.

## 1 Introduction

Job performance is the most critical topic in every organization. In order to reach to organization goals, every organization expects acceptable level of job performance from employees. Considering this issue is essential for organizations Ghafoorian and Faramarzi, (2010). (Belanger and et al, 2002 & Block, W, 2001). Information and communicational technologies are among the tools entered the job context in order to improve the job performance. But this also creates means for employee's leisure times in the working times. In other words, availability of technologies in the organization is like a double edge sword. However, while some organizations use electronic systems in order to communicate, collaborate, research and data management in some cases many employees abuse these technologies (Baturay & Toker, 2015) and/or use it for their own personal matters. This topic i.e. cyber loafing catches the attention of academia and managers of organizations in recent years. According to some researchers, one of the consequences of cyber loafing is the decrement of employees' job performance (Blanchard & Henle, 2008). Considering the importance of job performance for managers so that they also trying to find ways for improving it, so the cyber loafing can be a preventing factor or a barrier in job performance and this issue catches the attention of managers Yilmaz et al., (2015). Regardless of the amount of spending time as cyber loafing in organizations, the fact is that it is so much which regarded as a challenge for organizations. It means organizations concern that this issue would have negative effects on the productivity of the organization (Mastrangelo, 2006; Jia, 2008). Accepting the provided definition by Lim, i.e. "cyber loafing occurs when the employee uses the net for non-business means in business hours", it is easy to explain the objective of this research. So the present research aims to study the intensity of the relations between cyber loafing and job performance of employees. Considering the applied attitude of the present work, the relationship between cyber loafing and job performance of Ayandeh Bank employees examined.

### 1.1 Theories on Cyber loafing

On the whole, cyber loafing refers to the act of employees using their companies' internet access for personal purposes during working hours. But it should be noted that there is not a common definitions for cyber loafing among the scholars (Lim, 2002).

Some researchers used the term cyber loafing to indicate serious behaviors such as hacking and spreading computer viruses (Blanchard & Henle, 2008) although these radical behaviors are interesting topics for research, but their causes and consequences are different and should be investigated in a separate study. In the present study, cyber loafing refers to internet access of employees in working time such as YouTube, Facebook or personal internet searches. The reason for using such a simple definition for cyber loafing is that it is better to start the topic with a simple definition of the term in order to create a correct and better understanding of this phenomenon in the mind and then, discuss the different aspects of cyber loafing. We should consider two issues in defining cyber loafing. First, cyber loafing can be carried out not only by computers but also by smart phones and tablets. So in order to prevent the complexity of the term, we narrowed our definition of cyber loafing to use computer in office for personal matters and cyber loafing.

As mentioned, one can cyber loaf using tablets of mobile phones. For example, sending SMS is so widespread in work places that imagining an employee does not send SMS during work time is unlikely to happen. Augrin et al., (2013) defined cyber loafing as abusing internet in the work times. They believed cyber loafing is using internet for personal purposes more than necessary. Examples of cyber loafing can be online shopping, personal investment management, using social networks, sending emails and listening audio files or watching videos online. Yilmaz et al., (2015) defined it as using internet in work time in order to fulfill personal objectives. Wilson et al., (2010) in a similar definition defined it as pretending doing company works while fulfilling personal objectives in internet.

### 1.2 Types of Cyber loafing

Blanchard (2008) categorized cyber loafing in two different for;

1. Minor cyber loafing
2. Sever cyber loafing

Minor cyber loafing includes items such as checking personal emails but in sever cyber loafing, person does time consuming and negative activities such as viewing adult oriented sites, online gambling and such cases. They believe controllable cyber loafing is not only harmful but also can be regarded as break time and rest time activities and can improve job performance but in case of sever cyber loafing which is a dangerous one and there should be clear rules regarding this kind of cyber loafing and should be regarded as a destructive organizational behavior and against rules (Blanchard & Henle, 2008).

### 1.3 Effective Factors on Cyber loafing

Different variables introduced as the creating factors of cyber loafing and have higher integration in the emergence of this phenomenon. Factors such as social norms, personal attitude to cyber loafing, hiding cyber loafing from managers and supervisors and objectives of cyber loafing (Askew et al., 2014). Also two other variables i.e. responsibility and organizational justice have strong relationship with cyber loafing (Restubog et al., 2011) It is noted that the effect of these two variables on cyber loafing strongly affected by the work condition, it means that in some studies a strong relationship is reported between these variables with cyber loafing and in some other weak relationship is observed (De Lara, 2007). This incoherency can be due to the fact that although nonconformity of organizational justice is a determining factor on cyber loafing, but nonconformity of social justice among the people under survey was not so much to be introduced as a causing factor for cyber loafing. The strong relationship between loyalty and cyber loafing confirm the self-control theory introduced by Wagner et

al. (2012). The incoherency of correlation between loyalty and cyber loafing in different studies can be due to the different amount of work in different samples of the study, i.e. when the employee has not so much work to do then the effect of self-regulation and cyber loafing is not so strong.

Moreover, there are some other factors though they are less important but can be related to cyber loafing namely as personality, emotional non-planned works, extremism (Jia,2008; Krishnan et al., 2010).

Also it has been observed that the individual skills in using computer have direct relationship with cyber loafing (Garrett & Danziger, 2008). Moreover, some other factors such as company's supervision on employee's internet access, performance bond of non-cyber loafing rules, policies of the company regarding internet and having personal computers can be affective in the emergence of cyber loafing among employees (Mastrangelo,2006; Jia, 2008).As observed, age and gender can affect cyber loafing. Men and young people more than women and old people do cyber loafing (De Lara, 2007 & Garrett & Danziger, 2008 & Blanchard & Henle, 2008). Cyber loafing in educational setting is more widespread among boys than girls (Baturay & Tokar, 2015).

#### 1.4 The relationship between Cyber loafing and Job Performance

Although there is few information regarding the way cyber loafing affects job performance, but checking the available literature four perspectives can be recognized about the effect of cyber loafing on job performance.

According to the first perspective, cyber loafing decreases job performance by wasting effective work time (Blau et al., 2003). Based on this perspective the time used for cyber loafing could be used for organizational works and so the wasted time in cyber loafing resulted in decreasing the productivity. If this perspective proves true, then one can expect a negative correlation between cyber loafing and job performance.

The second perspective is somehow like the first one and stated that some cyber loafing behaviors negatively affects job performance or have more negative effects than other cyber loafing behaviors.

Lim & Chen (2009) stated that social behaviors have more negative effects on the productivity because these behaviors necessitates time, energy and perceptual resources. So abandoning these behaviors and returning to organizational works is more difficult than non-social behaviors for employee. Blau et al. reported the same result from interactive behaviors like social behaviors and online games. If such perspective proves true, then we can expect negative correlation between social behaviors and job performance. The relationship between such behaviors and decreasing productivity is stronger than the relationship between internet searching and job performance.

The third perspective has positive attitude toward cyber loafing effect on job performance. It states that cyber loafing creates a delay and rest time in business hours and when the employee returns to organizational work she/he continues more productivity (Belanger and et al, 2002 & Block, W, 2001). In this perspective it is assumed that decreasing the productivity is enough that compensate the wasted time for cyber loafing. Adherents of this perspective benefiting the Ego depletion model in order to confirm their own beliefs. If it proves true, then it is expected that a positive correlation exists between cyber loafing and job performance.

The fourth perspective stated that cyber loafing does not affect job performance or affect insignificantly (Blanchard & Henle 2008). It states that employees have specific amount of time dedicated to work and they cyber loaf when they have the time to do it. This perspective believes that the productivity of all

employees are the same and each person has a specific standard of working and cyber loafing when they have extra time to do it. If such an attitude proves true, then there is no correlation between job performance and cyber loafing. Moreover, cyber loafing creates negative effect only if it takes too long. As a general principle we can infer that long time of cyber loafing have negative effect on job performance.

To confirm each of the above mentioned principles, some evidences provided by the researchers and it is not clear cut which of the above mentioned perspectives is more correct than the other. The hidden link of all these investigation is that none of these studies evaluated in a real organization. Analyzing the cyber loafing and job performance relations let the researchers to determine which of the above mentioned perspectives explains the way cyber loafing affects job performance in real world.

## 2 Review of related Literature

Estiri (2010) wrote a review article titled as " cyber loafing". Based on this research to find out the best way to use internet access by employees is to know what exactly the employees do and how much time they spend to do it. He thinks that, results of the studies and also the idea of specialists confirms that the best way a company can do regarding cyber loafing issue, is to make comprehensive, precise and clear cut policies before employees gave access to internet.

Hengameh (2011) did a research entitled as " Studying causes and consequences of cyber loafing in Tondar Air Line Agency of Tehran". The aim of this study was to specifying the causes and consequences of cyber loafing in the air line agency and suggesting recommendations to reduce cyber loafing. The results indicated that personal, organizational and environmental / external factors are among those factors which play important role in cyber loafing. Thus it is expected from managers that have better and deep understanding of their environment and context and improve their company's performance by properly using modern technologies. Lim & Chen (2009) studied the impact of cyber loafing on the work and emotions of employees. Moreover, gender differences of employees regarding their understanding of cyber loafing was studied. Their findings indicated that activities such as internet search have desirable effect on the emotions of employees while receiving and sending email had negative impact. The obtained results of this study give novel perspective for managers and researchers regarding employee's idea about cyber loafing phenomenon. Pearson and Augrin studied the impact of punishments and preventive actions on cyber loafing in organizations. They believe that benefiting such preventive mechanisms will result in decreasing the cyber loafing of employees in business hours. The results of their study indicated that threats and diagnostic mechanisms, are effective factors in preventing activities such as visiting adult oriented sites, management of personal financial affairs and online shopping. To prevent activities such as sending and receiving email or visiting social networks simultaneously applying these preventive mechanisms are mandatory. In a study Kakolian and et al (2013), investigated positive consequences of cyber loafing in universities of Babol. Along the positive factors in cyber loafing, in this research the researcher tried to detect and present some of the positive consequences of cyber loafing in universities of Babol. Some hypothesis regarding the existence of positive relationship between the activities and behaviors of cyber loafing with job satisfaction, organizational commitment and job interest were tested. In order to check the relationships among variable the Pearson product-moment correlation coefficient and Structural Equation Modeling was used to calculate the amount of correlation between variable of the model. SPSS and LISREL software were used for related calculations to variables and suitability of the model. Analyzing statistical data revealed the positive relationship between job satisfaction 0.255, organizational commitment 0.451 and job interest 0.186 with cyber loafing.

### 3 Methodology

#### 3.1 Research Method

This is a kind of applied research and basically it is a kind of descriptive research and correlation one and regression analysis (Structural equation modeling) was used to analyze the data. Statistical population of the present research consists of the Ayandeh bank employees ACHIEVE model (Hersi & Goldsmith 2014) standard questionnaire and Askew cyber loafing questionnaire was used in order to collect data. The inferential and descriptive statistical methods were used. Descriptive method was used in order to check and describe general characteristic of those who answered the questionnaire. Inferential statistical methods namely normality of data test, structural equation modeling and confirmatory data analysis were used. The obtained data were analyzed using SPSS and LISREL software.

#### 3.2 Research Hypothesis

This research has one main hypothesis and three alternative hypothesizes (figure 1).

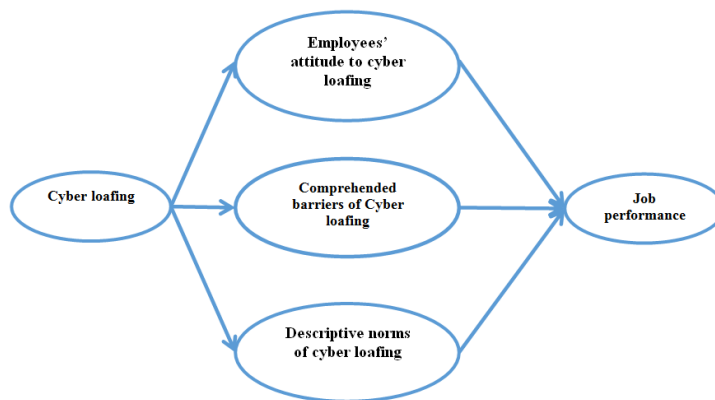


Figure 1. Schematic of research

#### 4 Data Analysis

Respondents' demographic characteristics were studied and the results are:

**Gender:** 158 of the respondents were Men (79%) and 42 were women

**Age:** 57 of the respondents were less than 30 years old (29%); 121 of them were between 30 and 40(61%); 19 of them were between 40 and 50 (8%); and three of them were more than 50 years old.

**Degree:** 12 respondents with associate degree (6%); 121 of them with BA degree (60%); 64 of them with MA degree and 3 of them with diploma or less than diploma degrees.

**Work Experience:** 82 of respondents with less than 5 years job experience (41%); 101 of them between 5 to 10 years job experience (51%); 9 of them between 10 to 15 years job experience; 8 of them with more than 15 years job experiences.

Then the normality of data tested using Kolmogorov- Smirnov technique with 5% significance level. The results are:

To check the normality of data, null hypothesis is that the data distribution is normal. So if the significance amount be higher or equal to 0.05, then there is no reason to reject the null hypothesis and distribution of data will be normal. The results of research hypothesis are:

Main Hypothesis: There is a significant relationship between cyber loafing and job performance in branches of Ayandeh Banks

Alternative Hypothesizes are as follows:

I. There is a significant relationship between the attitude of employees to cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

II. There is a significant relationship between the understanding barriers of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

III. There is a significant relationship between the descriptive norms of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

#### 3.3 Research Conceptual Model

According to the results in all cases the amount of significance is higher than 0.05; so, there is no reason to reject assumption. It means that data distribution is normal and we can use parametric tests and confirmatory factor.

Confirmatory factor analysis was used for the questions of the questionnaire. Considering the fact that the main tool of gathering data was questionnaire then all the obtained results of this research depends on the validity of questionnaire. Confirmatory factor analysis was used in order to check whether the items of questionnaire properly evaluated the variables of the research. The results are:

#### 4.1 Confirmatory Factor Analysis of Job Performance Questionnaire

To evaluate job performance 7 main factors (latent variables) and 16 questions (visible variables) were used. The acquired factor loading in all cases were a little higher than 0.2 which means the correlation between hidden variables (dimensions of main construct ) and visible variables are acceptable.

According to the results, measurement indexes for every used scales in confidence level of 5%, the t-values is higher than 1.96 which means that the observed correlations are significant (figure 2 and 3).

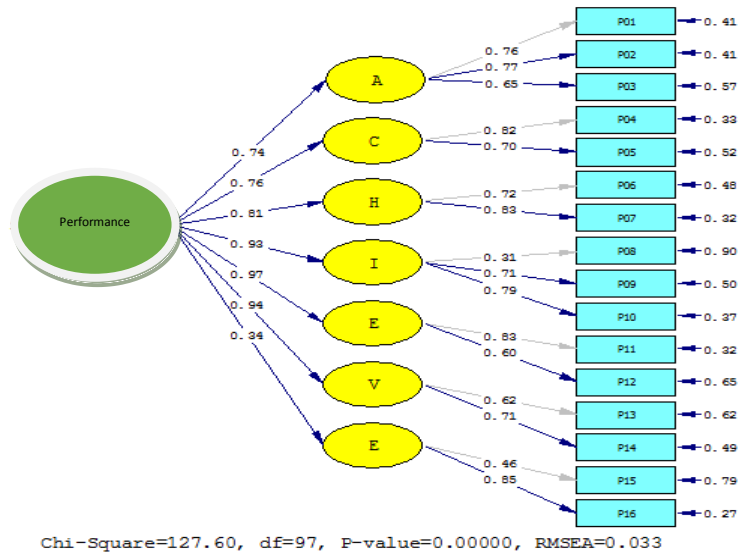


Figure2: Standard factor loading of confirmatory factor analysis for evaluating job performance scale

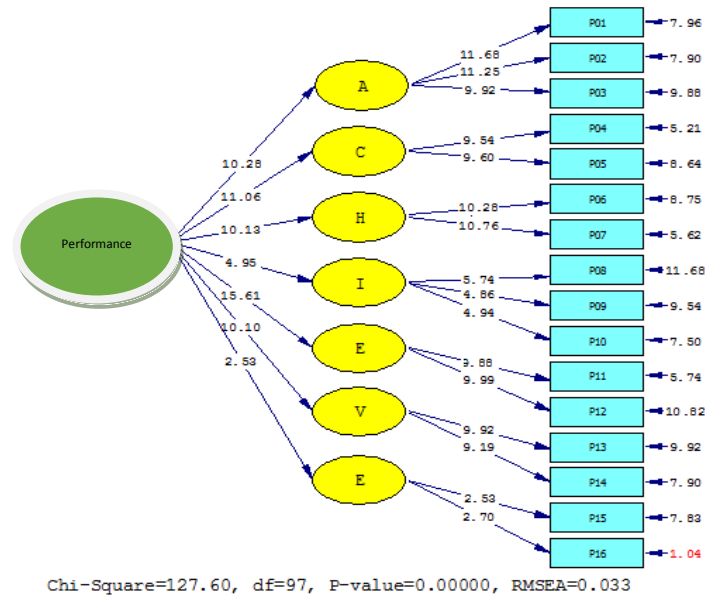


Figure3: T-value of confirmatory factor analysis for evaluating job performance scale

Also due to the use of second order confirmatory factor analysis, the relationship between hidden variable with the main construct i.e. job performance was investigated, too. In all cases, standard factor loading was higher than 0.4 which means there is higher correlational between job performance assessment and this construct. In all cases T prepared value was greater that the critical value (1.96) which means job performance was truly assessed for this construct.

In the second stage, model goodness of fit test was carried out and the result was:

$$\chi^2/df = \frac{127.60}{97} = 1.31 \tag{1}$$

In this research normal chi-squared was 1.31 and as it is between 1 and 5 then it is ideal. Also in the saturated model of the present

study RMSEA index is equal to 0.033 (lower than 0.05) which indicates the fitness of the model is ideal.

#### 4.2 Confirmatory factor Analysis Measuring cyber loafing

In order to measure cyber loafing, we used 3 latent variables (factor) and 14 observable variables (question). In order to assess the power of the relationship between factors (latent variable) with observable variables (questions of the questionnaire) standard factor loading of confirmatory analysis was greater than 0.2 in all cases. Therefore, factor construct of the questionnaire is valid. Also according to the observed results, factor loading of t-value for assessment indexes of each one of the studied cases with the significance level of 5% was a little bit more than 1.96. So the observed correlations were significant (figure 4).

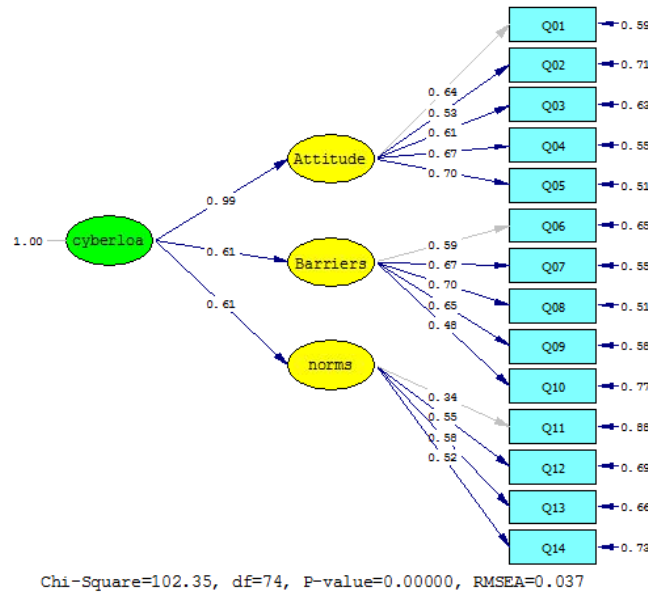


Figure4: Cyber loafing standard loading factor of confirmatory factor analysis

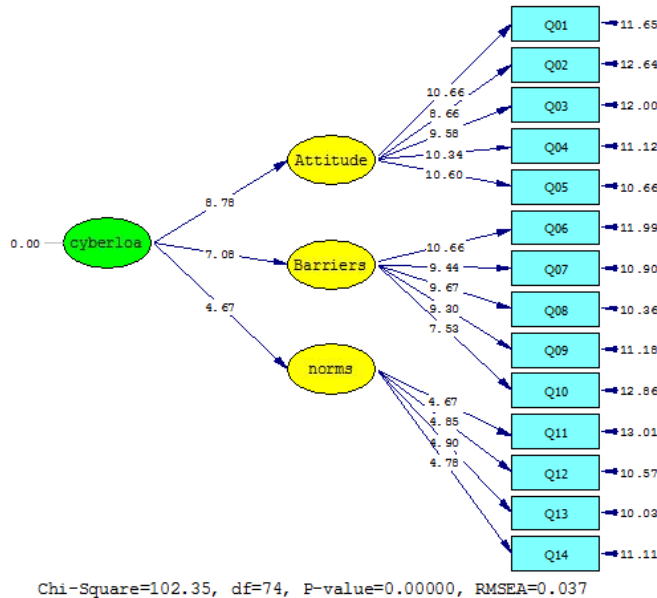


Figure5: Cyber loafing confirmatory factor analysis for t-value

Because of using second order confirmatory factor analysis, the relationship between hidden variables and main construct was investigated. The standard loading factor in all cases was a little bit more than 0.4 which indicate acceptable correlation between cyber loafing and the structure. Amount of t-value in all cases was greater than critical value (1.96) which means correctly assessment of the structure (figure 5).

After the test, research hypothesis was carried out using structural equation modeling and the results are:

**Hypothesis 1:** there is a significant relationship between job performance and employee's attitude toward cyber loafing phenomenon in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

The results obtained from investigating the relationship between two variables indicated that loading factor between employees' attitude toward cyber loafing and job performance was -0.40.

The t-value was -3.10 which greater than 1.96 was and it means the observed correlation was significant. Therefore, there is a significant relationship with 95% confidence level between employee's' attitude toward cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

**Hypothesis 2:** There is a significant relationship between perceived barrier of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

The results obtained from investigating the relationship between two variables indicated that loading factor between perceived barrier of cyber loafing and job performance was -0.35. The t-value was -2.12 which greater than 1.96 was and it means the observed correlation was significant. Therefore, there is a significant relationship with 95% confidence level between perceived barrier of cyber loafing and job performance in

Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

**Hypothesis 3:** There is a significant relationship between descriptive norms of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

The results obtained from investigating the relationship between two variables indicated that loading factor between descriptive norms of cyber loafing and job performance was -0.57. The t-value was -4.42 which greater than 1.96 was and it means the observed correlation was significant. Therefore, there is a significant relationship with 95% confidence level between perceived barrier of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

#### 4.3 Main Hypothesis of the Research: Relationship between Cyber loafing and Job Performance

Standard loading factor between cyber loafing and job performance was -0.45 and the t-value was -4.42 which indicates this relationship was significant. Therefore, there is negative and significant relationship between job performance and cyber loafing.

Also the rate of cyber loafing in Ayandeh bank was investigated and the results are:

The means of respondents' viewpoint about employees' attitude toward cyber loafing was 2.51. The significant 0.000. Therefore, the observed mean was significant. The t-values was -12.38 which was less than -1.96. Therefore, based on the statistical findings we can say with 95% confidence level that employees' attitude on cyber loafing was undesirable.

The means of respondents' viewpoint about perceived barriers was 2.02. The significant 0.000. Therefore, the observed mean was significant. The t-values was -24.18 which was less than -1.96. Therefore, based on the statistical findings we can say with 95% confidence level that perceived values of cyber loafing was undesirable.

The means of respondents' viewpoint descriptive norms was 2.08. The significant 0.000. Therefore, the observed average was significant. The t-values was -16.5 which was less than -1.96. Therefore, based on the statistical findings we can say with 95% confidence level that descriptive norms are preventive factors on cyber loafing.

#### 5 Conclusion

Cyber loafing which is defined as using a computer and net access for personal matters during business hour catches the attention of academia and managers of organizations in recent years. Some of the researches reported that decreasing job performance is one of the consequences of cyber loafing. Decreasing the job performance of employees is one of its consequences while the performance is critical for managers and continuously trying to increase it. So, cyber loafing as a preventing factor in job performance gained the attention of organizational managers more than before.

This research investigated the relationship between cyber loafing and job performance in order to offer suggestions to deal with this phenomenon.

There results of present studies are:

- Based on gender, most of the respondents were men (158).
- Based on job experience, most of the respondents have experience between 5 to 10 years.
- Based on age, the majority were between 30 and 40 years old.

- Based on the degree, the majority have the BA degree.

The relationship between different aspects of cyber loafing and job performance was investigated with three different hypotheses. The results of hypothesis test revealed that there is a positive and significant relationship between job performance and three aspects of cyber loafing in northern branches of Ayandeh Bank. Based on the observed loading factor, the descriptive factors of cyber loafing have notable relationship with job performance. There is a moderate relationship between employee' attitude toward cyber loafing and job performance and the perceived barriers in cyber loafing barely affects job performance.

- Therefore, there is a significant relationship between employee's' attitude toward cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.
- Therefore, there is a significant relationship between perceived barriers of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.
- Therefore, there is a significant relationship between descriptive norms of cyber loafing and job performance in Ayandeh Bank Branches of Guilan, Mazandaran and Golestan provinces, Iran.

The relationship between aspects of cyber loafing and job performance was investigated using three hypotheses. To evaluate the general relationship between cyber loafing and job performance we used structural equation modeling. The standard loading factor relationship between cyber loafing and job performance was -0.45 which was moderate. The t-value was -4.42 which indicate this relationship is significant. Then there is a negative and significant relationship between cyber loafing and job performance.

I. It is recommended to have certain educational programs to improve the attitude of employees on cyber loafing. Presenting statistical documents on some damages caused by cyber loafing and the negative results which ultimately affects the employees themselves (directly or indirectly) can be part of this program. This perspective which states using the internet is not pastime to end the business hours, should be boosted. The employees should know that unbridled cyber loafing will result in inefficiency of the whole organization.

II. The organization should have special contrivances to supervise and administer on the net access during business hours. Also, preventive and punitive mechanisms should be clear, in this case, preventive and precautionary mechanisms will lose their preventive nature.

III. The organization's convention and common-law should not lead the employees to cyber loaf in social networks during business hours. There should be contrivances to prohibit cyber loafing, checking personal emails and surfing unrelated websites to the work and nature of the organization during business hours and

IV. Controlling cyber loafing would result in improving job performance of the organization. If and only if the negative aspects of the cyber loafing bolded to employees and knowing that too much using on net access and cyber loafing for personal purposes in work context threaten their own and organizational success, then we can expect the cyber loafing would decrease and consequently job performance will increase.

#### 5.1 Suggestions for Further Studies

- 1) The researchers can use the designed scale to investigate the relationship between cyber loafing and job performance in other provinces.
- 2) Studying other variables relationship with cyber loafing is recommended for the future researchers. Also it is recommended to study and investigate this relationship in a mid-term period on a specific job or organization so that the results will be valid and notable.

- 3) The researchers can improve the designed scale by increasing their range of studies to recognize and modify factor and items.
- 4) It is recommended to investigate other factors influencing cyber loafing.

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