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## **The Effect of Perceived Personal Discrimination on Internet Addiction: A Case Study in Vietnam**

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### **Abstract:**

*Internet addiction has recently become one of the emerging issues in common life. There would be an urge in working out the factors affecting this problematic use of the Internet, one of which is perceived personal discrimination. This research aims to make an evaluation on the influence of perceived personal discrimination to Internet addiction in the Vietnamese context. The research conducted a survey with the participation of 477 respondents. The data was processed with software Excel 2016 and analyzed by using descriptive statistics, factor analysis, reliability test and regression in software SPSS 20.0. The empirical results showed that perceived personal discrimination significantly affects Internet addiction. Thereby, this research recommended orientation for the next studies on Internet addiction.*

**Keywords:** *Internet addiction, perceived personal discrimination, Vietnamese*

### **1. Introduction**

Internet has become an emerging issue in the past decades (Hernández et al., 2019; Karaer & Akdemir, 2019). The more prevalent the Internet is, the easier the life is getting (Bromi Aiguissi Didier Landry et al., 2019). However, the Internet is such 'a doubled-edge sword' that the excessive use of the Internet may cause serious consequence, namely Internet addiction (Zhang et al., 2019). Internet addiction is understood as a type of serious mental disorder, and has begun to endanger the physical and mental health of young people, which leads to urgent need of investigations into factors affecting this negative symptom in order to improve the situation (Nalwa & Anand, 2003). In fact, Internet addiction has received lots of attention from a huge number of researchers and this symptom has been explained by several factors. For example, perceived social support was proved to have diverse relation with Internet addiction in the studies of Wang & Zhang (2020) and Esen et al. (2010). According to Wang & Zhang (2020), Hamissi et al. (2013), Hasan & Salar (2012), Beranuy et al. (2009), emotional intelligence is another reliable predictor of Internet addiction. Furthermore, perceived personal discrimination is figured out to be a potential indicator of Internet addiction in the research of Wang & Zhang (2020). The study of Wang & Zhang initially aimed at testing the influence of perceived social support on Internet addiction. However, the findings were that perceived social support indirectly affects Internet addiction through perceived personal discrimination factors. It means perceived personal discrimination has direct effect on Internet addiction. Wang & Zhang also stated that perceived personal discrimination maybe an important variable that has not received much concern as it deserves.

From pointed out literature gap, this study focuses on examining the impact of perceived personal discrimination on Internet addiction based on the sample size of 477 and the support of software SPSS 20.0. To achieve the goal above, this writing is structured in 5 parts. The first part shortly introduces the rationale of the subject. The second part indicates literature review on the influence of perceived personal discrimination on Internet addiction and suggests research model. The third part presents research method. The fourth part summarizes research results. And the fifth part is for discussion and conclusion.

## 2. Literature Review and Research Model

### 2.1. Literature Review

Internet addiction is also acknowledged as the problematic Internet use, pathological Internet use, Internet abuse (Morahan-Martin, 1997), or internet exploitation (Young & Rodgers, 1998). But Internet addiction is the widely used by the major of researchers (Kirallo, 2005). Internet addiction is defined as a type of psychological addiction and featured as increasingly depend on the Internet, feeling annoyed when being disconnected and looking forward to using the Internet (Nalwa & Anand, 2003). The term Internet addiction in recent studies is used to generate the uncontrollable and misuse of the Internet. (Kirallo, 2005). According to Ferris (2003), Internet addiction also means that internet is used as a way of coping with the feeling of helpless, guilt, anxiety or depression. Internet addiction exerts detrimental effects in several aspects of the daily activities of people. Anderson (1999) found that a huge number of the students had academic problems as a result of Internet addiction. In the study of Yen et al.(2007), it is discovered that people suffering from Internet addiction had higher attention deficit-hyperactivity disorder (ADHD) symptoms. Furthermore, the studies by Morrison and Gore (2010), and Christakis et al. (2011) also proved that Internet addiction victims are more vulnerable to depression than normal people. There was a significant correlation between depression levels and internet addiction disorder.

A study of Young KS (1998) developed a 20-question-scale to measure the level of Internet Addiction among Spanish students, which composes of intrapersonal factor and interpersonal factor. This measurement was also applied in Young's later studies and has been widely used in recent those of Marta Beranuy et al. (2009), Khoshakhlagh & Faramarzi (2012), Jaleleddin Hamissi et al. (2013). In general, the major of international studies about Internet addiction use this scale. Pawlikowski et al. (2013) shortened the IAT (Internet Addiction Test) of Young down to a 12-item-questionnaire named the s-IAT. The study supposed that this scale possesses good psychometric properties and indicates the key diagnostic criteria of Internet addiction. This questionnaire was also translated into Vietnamese under the instruction of WHO. Additionally, the shortened scale was used in Vietnamese background recent studies by Bach Xuan Tran et al. (2017). Also 12 questions are grouped into two key factors, which are lack of control/time management and craving/social problems. For the timing and contextual reasons, the s-IAT was used in this study.

Perceived personal discrimination is a negative cognition, which describes the situation in which an individual recognizing himself of being underestimated or treated unfairly (Wooda & Cooka, 2019; Pascoe & Richman, 2009). Unlike objective discrimination, perceived personal discrimination is a psychological reality that influences individuals in terms of psychology and behaviors (Dion & Kawakami, 1996; Fu et al., 2017). According to the cognitive theory of depression (Zhanget al., 2019), little social support negatively affects in individual's critical thinking ability, which tends to create discrimination perception. Based on the theory of self-treatment (Hsieh et al. 2016), it is believed that Internet addiction is a maladjustment from sorrows and a maladjustment confronting strategy used to heal psychological wound and unhappy experience. On the one hand, perceived discrimination is a tremendous source of stress, which has a predictive effect on Internet addiction (Meena et al., 2015; Kuss et al., 2014) because Internet can be seen as a safe haven where people can get rid of anxieties derived stress (Ye & Zheng, 2016; Hsieh et al., 2019). On the other hand, perceived discrimination leads to their lack of belongingness. Their demand for belongingness can be met by the usage of the Internet (Gross, 2004; Heet al., 2015). Through this way, they are over-dependent on it, which finally results in Internet addiction (Ko & Roberts, 2005).

The perceived personal discrimination scale composed by Liu & Shen (2010) was developed to examine the degree of discrimination perceived by Chinese children. The questionnaire consists of 20 typical discrimination incidents experienced by children, with a 5-level Likert scale ranging from 'completely disagree' to 'completely agree'. The higher the score, the more discrimination they perceive. The questionnaire had also been used in many studies (Xing et al., 2011; Fan et al., 2012). There is another measurement of perceived personal discrimination used in studies in developing countries called 'Everyday Discrimination'. This 11-item-scale was developed and first used by Jackson et al. (1996), then appeared in the studies of Schulz et al. (2000) and K.J. Ajrouch et al. (2010). The questions are divided into 2 representative scale items called 'I have been treated with less courtesy than others' and 'People have acted as if they were better than me'. Besides, the 'Everyday Discrimination' aims at surveying the adults about the frequency of their being mistreated. Although China has many similarities to Vietnam in political way and economics way, the latter scale was chosen to be used in this research due to the aging group of the aiming surveyors.

There are few studies on the impact of perceived personal discrimination on Internet addiction because this factor is just implied as another expression of 'lack of perceived social support'. However, almost all of them considered perceived personal discrimination as the mediating role between perceived social support and Internet addiction. According to Karaer & Akdemir (2019), insufficient social support may result in Internet addiction. Zhang et al., (2019) supposed problematic behavior like Internet addiction is the consequence of interaction between social surroundings and individual's characteristics. Some studies found that perceived personal discrimination plays a role in individuals' psychological aspect and behavior through their internal cognitive system (Hyde & Gorka, 2011). Other studies indicated that malpractice in social support the risk in individuals' demand for accompaniment and can be used as an indicator of Internet addiction (Ding et al., 2016; Song et al., 2010).

## 2.2. Research Model and Hypothesis

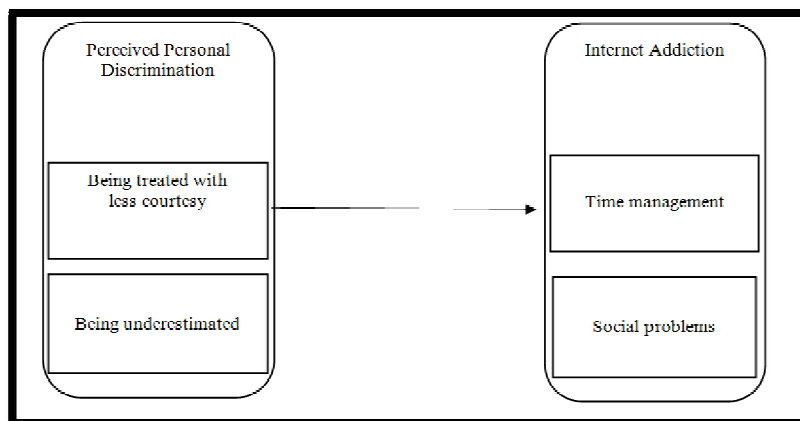


Figure 1: Research Model  
Developed by Research Group

- Hypothesis: Perceived personal discrimination positively affects Internet addiction.

## 3. Research Methods

### 3.1. Measurement Development

Based on previous studies about discrimination and trouble Internet using, a questionnaire including 23 items was developed by research group in order to measure perceived personal discrimination and Internet addiction. Specifically, indicators on perceived personal discrimination were selected and adjusted from a survey called 'Everyday Discrimination' in the study of Jackson et al. (1996); and items on Internet addiction were shortened from CERl scale of Young (1998).

The questionnaire was translated into Vietnamese by 2 bilingual teachers who expert in both English and Vietnamese. Both are also the natives and have the experience in using the Internet. They translated independently and discussed with each other after that to make sure the Vietnamese version of the questionnaire is adaptable to Vietnamese context. Then this questionnaire was evaluated by 4 lecturers and 5 other people having experience in using the Internet. Thanks to the recommendation of this group of 9 people, 4 items were adjusted in word choice to make themselves more understandable. After being edited, the questionnaire was sent to another group of 20 people for a trial survey. Responses from this group were that the questionnaire was interesting and easily made out. Finally, the official survey was conducted.

### 3.2. Research Sample

The surveyors mainly major in economics and technology because these 2 fields account for the most human resource in Vietnam. The questionnaire approached to them via social network in the form online survey to ensure that all the surveyors had the chance to get access to the Internet. The total responses were 500; and after a filtering procedure, the number of reliable responses were 477 (account for 95.4%).

### 3.3. Data Analysis

Statistics software SPSS 2020 was used in order to input the data and progress the statistics analysis. This study includes Descriptive statistic, Exploratory Factor Analyses, Reliability testing and the Linear Regression Analysis. Descriptive statistics was used to check demographic characteristics. The aim of Exploratory Factor Analyses (EFA) was for testing the scale values, examining the correlation among variables in the dataset. The Cronbach's Alpha scale was conducted to evaluate the reliability of the scales and have the Item-Total Correlation compared to discard inappropriate observations. Finally, the Linear Regression Analysis helped to figure out the extent of perceived personal discrimination impact on Internet addiction.

## 4. Result

### 4.1. General Information

N = 477	Frequency	Percentage
Gender		
Male	167	35.0
Female	310	65.0
Major		
Technology	131	27.5
Economics	315	66.0
Others	31	6.5
Internet usage experience (years)		
<3	16	3.4
3 - <5	118	24.7
5 - <7	152	31.9
7 - <10	122	25.6
>=10	69	14.5
Internet usage frequency (hours per day)		
<1	3	0.6
1 - <3	46	9.6
3 - <5	127	26.6
5 - <7	141	29.6
7 - <11	103	21.6
>11	57	11.9

Table 1: Data Descriptive Statistics  
Source: Synthesized By Research Group

Table 1 demonstrates the structure of research sample in demographical aspects: gender, major, Internet usage experience and Internet usage frequency. In the sample size of 477, male accounted for 35% and 65% were female. Obviously, gender ratio varied but this issue is explicable because the survey was mostly conducted on people having major in economics and technology. Data from table 1 also shows that 66% of the surveyors majored in economics and 27.5% of them worked in technology. In addition, there is a fact that almost the staff in technology is men, and the major of human resource in economics is women. About the experience, most of the surveyors got access to the Internet from 7 to 5 years ago, and that was exactly the time when the Internet became popular in Vietnam. Besides, the highest values of Internet usage frequency go to the period from 3 to 11 hours per day. It is understandable because it presents a handful of situations. They are because people may use the Internet for task, entertainment or both.

### 4.2. Factor Analysis and Reliability

Exploratory Factor Analyses (EFA) were conducted with group of variables: 11 items of the independent variables and 12 items of the dependent variables. The results of EFAs showed in table 2 indicate that the KMO index of the sampling adequacy was 0.878 for independent variables, proving that the data was suitable for analysis. Furthermore, significant = 0.000 < 0.05 which means the factor analysis was appropriate.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.878
Bartlett's Test of Sphericity	Approx. Chi-Square	2565.209
	Df	153
	Sig.	.000

Table 2: Result of Factor Analysis EFA  
Source: Synthesized by Research Group

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.643 <sup>a</sup>	.414	.411	.44800	2.064

Table 3: Model Summary  
Source: Synthesized by Research Group

The table of model summary (table 3) shows the value of R square of perceived personal discrimination effect on Internet addiction is 0.414, which means perceived personal discrimination can explain up to 41.4% the variation Internet addiction. The Cronbach's coefficients in table 4 ranging from 0.672 to 0.81 proved the consistency of these variables.

Names	Number of items	Cronbach's alpha
Being treated with less courtesy (LC)	6	0.810
Being underestimated (BU)	4	0.712
Time management (TM)	3	0.672
Social problem (SoP)	5	0.756

Table 4: Summary of Variables  
Source: Synthesized by Research Group

#### 4.3. Regression Analysis

Model		Coefficients <sup>a</sup>				Collinearity Statistics		
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	1.278	.095		13.461	.000		
	LC	.500	.038	.509	13.318	.000	.847	1.181
	BU	.190	.030	.241	6.314	.000	.847	1.181

Table 5: Regression Analysis Result  
Source: Synthesized by Research Group  
 $IA = 1,278 + 0.509*LC + 0.241 BU$

From the standardized regression coefficient beta, the more powerful factor affecting Internet addiction (IA) is the level of Being treated with less courtesy (LC), when the impact of LC level increases by 1unit, IA increases to 0.509unit. The other is Being underestimated (BU), when the BU increases by 1unit, IA increases to 0.241unit. This is reasonable, when factor BU in fact may derive from both opposite positions: the bullies and their receivers. Besides, if people get treated unfairly, they will easily get mad for they are not deserve it. Both these factors are statistically significant, as evidenced by the fact that they all have Sig. <0.05.

This regression result bears a close resemblance to that in the study of Wang and Zhang (2020). In the study of Wang and Zhang, perceived personal discrimination had a positive impact on Internet addiction ( $\beta = 0.474$ ,  $P < 0.001$ ). It can be concluded from their research that perceived personal discrimination can positively predict Internet addiction. This study has the same conclusion. However, there is a slight difference in the independent variable between the 2 studies. This studies divides perceived personal discrimination into 2 separated factors (Being treated with less courtesy and Being underestimated), while perceived personal discrimination in the research of Wang and Zhang does not have any specific division.

#### 5. Discussion and Conclusion

From the regression analysis, it can be concluded that perceived personal discrimination is the positive predictor of Internet addiction with beta coefficients both higher than 0. This means the more people realize that they are discriminated, the higher the possibility they get addicted to the Internet. It is reasonable for the Internet to be an ideal place for people to relieve stress and hide themselves from triggers.

It supports the social cognition theory of Narciss and Huth (2004) believing that behavior varies with the diversities of people and surroundings. Insufficient social support can make individuals feel lonely and lack in support (He, Hui, & Liu, 2015). This may result in the recognition of discrimination. Consequently, individuals try to avoid themselves from social communication and embrace themselves in the virtual world of the Internet where their need of belongingness can be satisfied. According to psychological-decompensation theory, this negative experience makes the development of adolescence blocked, and leads to their deviation of development and formation of Internet addiction (Wu et al., 2019). Thus, the role of perceived personal discrimination in forming Internet addiction should be taken into consideration in the next studies. In practice, it is recommended that social support be provided to decrease the rate of discrimination as well as to be an effective intervention to prevent Internet addiction.

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