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## **SOCIAL NETWORK: THE FORMATION AND MAINTENANCE OF THE SOCIAL CAPITAL IN A FLAT WORLD**

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**ABSTRACT:** *In fact, the capital, people often think of money, property... however there is a type of capital formed through personal relationships, friends... and it becomes helpful to help us solve problems in our life, it is called social capital. The paper objective is to study the factors affecting social capital in the context of connecting online through social networks. The results showed that there is a relationship between the reason for using social networks and the level of using social networks, the relationship between the level of using social networks and the components that make up the concept of social capital including friendship social capital, cooperative social capital and social capital maintained. In addition, the subjective of happy status of social network users also quite clearly affects the components of social capital.*

**KEYWORDS:** Social, network, social capital, flat, Internet and UEH.

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### **INTRODUCTION**

In life, many times we need to mobilize help from our relationships to solve our work. Especially when you are faced with a crisis or maybe when you need to find a job, borrow money to develop a business, solve health care issues, study...; personal relationships, friendships, relatives or acquaintances become helpful to help us solve these problems and gather all such different relationships tapped in many areas. Different sectors of society form the concept of social capital (Putnam, 2000).

Besides, The Internet is in the 70s and 80s of the 20th century and the arrival of the World Wide Web in 1991. It changes in the need for people to connect and share information originated for the rapid development of the first series of social networking sites such as Classmates.com (1995), Ask.com (1996), Blogger (1999), Wikipedia (2000)... Today, social networks are getting better and better, allowing users to express themselves, connect with their networks, establish and maintain relationships with other audiences (Ellison & co. (2007). The problem here is that in the context of online connectivity, the presence of social networks will affect how the process of forming and maintaining social capital is in the flat world.

Moreover, the scope of this paper focuses on the social network such as Facebook to address the following research objectives: (1) Building a scale system according to the theoretical framework suitable for social capital research in this era and online connection. (2) Assess the impact of social network boom and test the relationship of new social interaction, online interaction, to the formation and development of social capital. (3) Examine the formation of social capital in varying degrees of subjective well-being. (4) Proposal to socio-economic

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managers on the change of social capital in the new field. Subjects collecting research data are students studying post-secondary education programs at 29 universities and colleges in Ho Chi Minh City. All of students are using the social network such as Facebook. The sample size of the study was 306 students.

## **LITERATURE REVIEW**

### *Concepts related to research*

#### **Social network concept**

According to Tran Mai Vu & Ha Quang Thuy (2016), Social networks define “a social structure consisting of individuals or organizations, often represented by nodes, along with social relations. Besides, the association with respect to the links between the nodes” in which the node is the agent or entity with social elements and the supply (edge) is the relationship or interaction between the nodes. In addition, social networks are classified into different categories according to the characteristics of each type. In this paper, the authors focuses on researching social networks in a more specific context, it is great online connection. Specifically, online social network defined as a social network operated on the basis of online social networking services, it developed from the Internet by Tran Mai Vu & Ha Quang and Thuy (2016). In particular, online social networking sites are a type of virtual community that has been rapidly becoming more popular than ever in recent years by Dwyer, Hiltz & Passerini (2007).

Besides, Facebook is a free access website operated, it established on February 4, 2004 by Eldon (2008), providing a community connection platform that allows online access. Facebook was reviewed and selected by the author as a typical social network studied throughout the topic. Because many factors that Facebook owns are appropriate and represent the current use of social networks. It is to contrary to the content that most media publications still focus on, the negative consequences of using Facebook. It caused by misperceptions of users, the topic focuses on analyzing issues that follow. According to Ellison et al (2007) Facebook is still quite new revolving around the social capital gained from the explosion of social networks.

#### **Social capital concept**

According to Nguyen Tuan Anh (2011) and Dinh Thi Thom (2009) showed that the concept of social capital was first studied in 1916 by the American educator, Lyda Judson Hanifan, to indicate friendship, sympathy and mutual understanding as well as interactions between individuals or families. In the 1980s, social capital was defined in the social science dictionary by Fukuyama (2002). According to Smith & Kulyunch (2002) and Portes (1998), the concept of social capital became an important scientific concept in Bourdieu's "The forms of capital" published in 1986. The term "social capital" was put into research in many different fields and began to appear heterogeneous notions depending on the approach of the research but it could be divided into two main directions as follows by Dinh Thi Thom (2009); Adler & Kwon (2002). The first and most popular approach initiated by Putnam (2000) arguing that the concept of social capital describes ways of interaction of network members such as from talking to neighbors to joining political parties... The second approach is based on the research of Portes (1998), Lin (1999, 2001) and

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Burt (2000) recognizing that social capital as a resource that individuals can use through relationships within the connected network. Social capital is completely different from physical capital because of its social nature. And so it can only be accessed and used through relationships.

### **The scale of social capital for Internet**

The concept of social capital is extremely vast and what has been studied so far is only part of the whole (Williams, 2006), the topic needs to explore combinations from multiple measurement methods. in different ways to describe the different components of this capital. There have been many studies on social capital in the past that go into solving these problems despite certain limitations.

According to Quan-Haase and Wellman (2004) in the study "How does the Internet affect social capital?" Explored the emergence of the new elements that constitute social capital in the context of the increasingly popular Internet. Besides, Williams (2006) studied that "On and off the 'net: Scales for social capital in an online era". It is building a set of social capital scales, in the semantic of output benefits, more in line with the public age information technology and online with questions about the many aspects of basic social relationships. In addition, Ellison et al. (2007) with the study "The benefits of Facebook", "friends" such as Social capital and college students' use of online social network sites analyzed the impact of a typical application on the Internet, social networks to the elements of new age social capital. Therefore, the authors focused on analyzing the concept of measured social capital in the framework of a research model based on Quan-Haase and Wellman (2004), Williams (2006) and Ellison and et al (2007). The questionnaires developed to measure the elements of this paper were also based on above mentioned things.

### **Components of the social capital scale**

According to Nguyen Tuan Anh (2011) divides social capital into two basic types. It including social capital "clustering" in (bonding social capital) and social capital "reaching" out (bridging social capital). In particular, Putnam (2000) presents the differences between the two components as follows: social capital "collapses" in strong, intimate and close relationships stemming from the emotional aspect between individuals such as family relationships or close friends, intimates. This can call this social capital a social capital of friendship; meanwhile, social capital "reaching out" appears in less durable bonds, often resulting from the mutual benefit of the group or the interests of the whole group with little emotional cohesion. According to Granovetter (1982) showed that social capital can be called cooperative social capital. In addition, Williams (2006), Ellison et al. (2007) studied that social capital in the context of the Internet is also known for another important factor, representing the ability to maintain valuable connections. Social capital is changed by the change of each individual's life which is the concept of social capital maintained.

### **The subjective of happy status**

In addition to the research components of online relationships that have a significant impact on social capital of the online era. The research concept of personal social network users should also be considered in the relationship. The relationship with the formation of social capital in the young community Ellison et al., (2007) is a subjective state of happiness. According to Nguyen Van Hit

and Bui Thi Thu Ha (2016), subjective happiness is a subjective assessment of a person being satisfied with his or her own life which is both an awareness and a feeling.

## **Research hypotheses and models**

### **Reasons for using social networks and behavior for using social networks**

The relationship between the reason for using social networks and the behavior of using social networks are mentioned by Steinfield, Ellison and Lampe (2007). In addition, Ellison et al. (2007) also suggested that items provided for users to build their own public profile on social networking websites. It is a way to provide personal information for themselves, old friends, current classmates as well as family or relatives to follow, connect and interact. Moreover, this is also a way for new users to connect with each other even though they have never known them before. Based on mentioned thing, the authors propose the following research hypothesis.

*Hypothesis H1: Reasons for using social networks has a positive impact on behavior for using social networks.*

### **The level of using Facebook and awareness of each individual about their cooperative social capital**

According to Resnick (2001), online relationships supported by information technology applications are increasingly improved. it including organizing connected lists integrating friend lists from multiple sources and storage. This facilitates the formation of links and cooperation in work, thereby creating the basis for social capital for development cooperation by Ellison et al., (2007); Donath & Boyd, (2004); Resnick, (2001); Wellman et al., (2001). In addition, social media in many recent studies has also been mentioned as providing a positive platform to support these relationships formed and developed by convenience, simplicity and low cost by Donath & Boyd, (2004). Based on mentioned thing, the authors propose the following research hypothesis.

*Hypothesis H2: The level of using Facebook has a positive impact on cooperative social capital.*

### **The level of using Facebook and awareness of each individual about their friendship social capital**

According to many studies with qualitative approaches, there are not really conclusions with high confidence about the relationship between the level of using Facebook and social capital in the perception of individuals despite many studies. Research on this issue by Bargh & McKenna (2004). According to Williams (2006), many studies analyze the loss due to the increase in social network usage but are still not sure enough because the subjectivity of ignoring the importance of online benefits is created. In addition, according to Boase, Horrigan, Wellman and Rainie (2006), current social media reports showed that users have a wider network of friendly relationships than those who rarely use. Based on mentioned thing, the authors propose the following research hypothesis.

*Hypothesis H3: The level of using Facebook has a positive impact on friendship social capital.*

### **The level of using Facebook and awareness of each individual about social capital maintained**

According to many other studies on the habit of using the Internet. In the case of studying objects at the transition stages of geography is living environment in life (for studying, working), the Internet has an important role in maintaining the relationships between these research subjects than individuals who use the Internet as a medium of communication in everyday tasks that require communication and interaction like the learning environment in universities, colleges... or working environment by Wellman et al., (2001). Specifically, according to research by Cummings, Lee and Kraut (2006), use Internet services is to communicate to help the post-secondary education student community to maintain contact with their old friends when they relocate to their places of study and work. Based on mentioned thing, the authors propose the following research hypothesis.

*Hypothesis H<sub>4</sub>: The level of using Facebook has a positive impact on social capital maintained.*

### **Hypotheses based on the subjective of happy status**

According to Ellison et al. (2007), social networks are a useful connection platform. This is affecting the social capital of individuals, especially when considered in the influence of the subjective of happy status. Because the Internet for people with low the subjective of happy status. This will create less barriers to social interaction than when communicating directly in daily life for work, study and thereby it created and maintain social capital better than normal levels by Bargh, McKenna & Fitzsimons (2002); Tidwell & Walther (2002). However, it should be noted that the subjective of happy status mentioned in this paper limited to the scope of the study. The effect of having few friends and acquaintances in the past by the peculiarities of life. Overall study by Bargh & McKenna (2004). Based on mentioned thing, the authors propose the following research hypothesis.

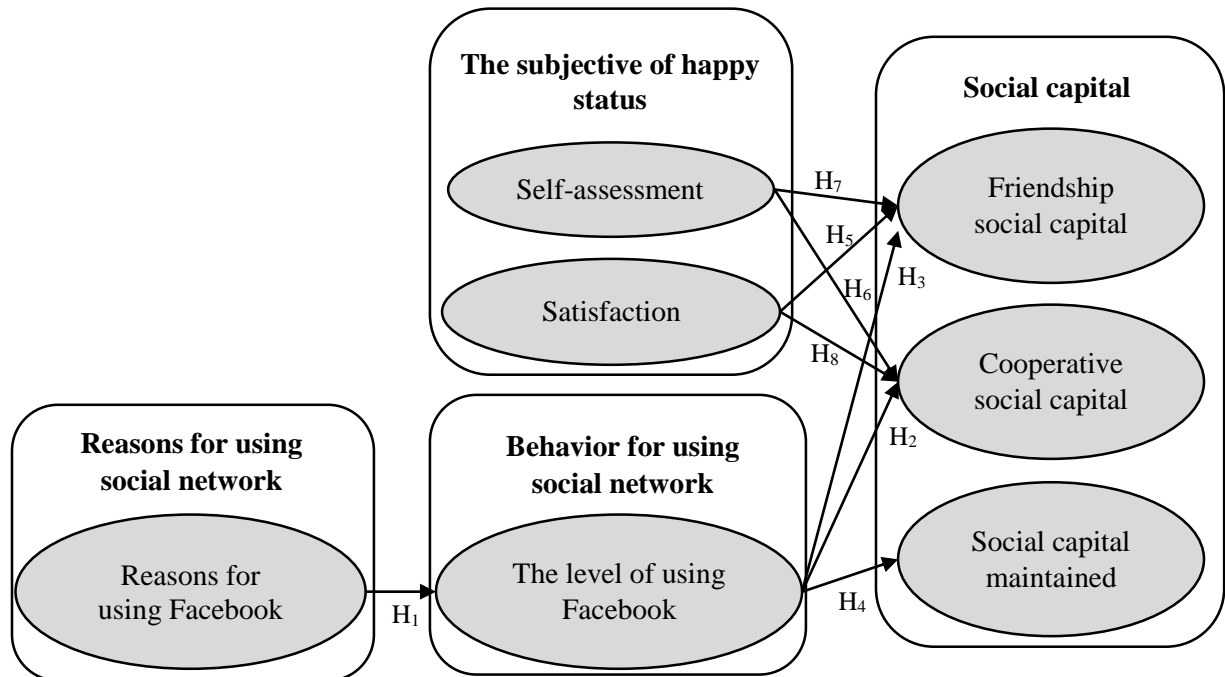
*Hypothesis H<sub>5</sub>: Satisfaction has a positive impact on friendship capital maintained.*

*Hypothesis H<sub>6</sub>: Self-assessment has a positive impact on cooperative capital maintained.*

*Hypothesis H<sub>7</sub>: Self-assessment has a positive impact on friendship capital maintained.*

*Hypothesis H<sub>8</sub>: Satisfaction has a positive impact on cooperative capital maintained.*

Research model for factors affecting the social capital following:



(Source: Researchers proposed)

**Figure 1: Research model for the factors affecting the social capital**

## METHODS OF RESEARCH

The authors used a combination of qualitative and quantitative research methods to test the hypothesis. Using qualitative research methods to calibrate scales from previous studies of Ellison et al. (2007), Steinfield, Ellison & Lampe (2008), Cohen & Hoberman (1983), Williams (2006), Rosenberg (1989), Diener, Suh, & Oishi (1997), Pavot & Diener (2009)...

Qualitative research with group interview technique with selected subjects and experts helped adjust the scale for the components of the research model as follows: Adjust the words in the statements to become closer, easier to understand. In addition to the three-observed research model, it is "I feel like I am part of the Facebook community." On the Facebook Usage scale, "I use Facebook to interact with teachers" in The reason for using Facebook, "I can know about events happening elsewhere where my former classmate lives." on the social capital maintained scale. Edit the content of most measurement variables to fit the research context and scope of the study in the student community in Ho Chi Minh City.

Eliminating 11 observed variables in the measurement with 8/11 variables is the use of a reverse scale to check the validity of the investigation. As a result, the "Facebook use" and "Reason for using Facebook" scales were measured by 6 observed variables; the scale of "cooperative social capital" is measured by 11 observed variables; the scale of "social capital maintained", the scale of "Friendship social capital", the scale of "Self-assessment" and the scale "Satisfaction with

learning environment" are measured by 5 observed variables. The study uses a 5-level Likert scale, with 1: Strongly disagree; 5: Strongly agree. The researcher had confirmatory factor analysis (CFA) and model testing with Structural Equation Modelling (SEM) analysis. The purpose of CFA helps to clarify: (1) Unilaterality, (2) Reliability of scale, (3) Convergence value, and (4) Difference value. A research model is considered relevant to market data if Chi-square testing is  $P\text{-value} > 5\%$ ;  $CMIN/df \leq 2$ , some cases  $CMIN/df$  may be  $\leq 3$  or  $< 5$ ;  $GFI, TLI, CFI \geq 0.9$ . However, according to recent researchers' opinion, GFI is still acceptable when it is greater than 0.8;  $RMSEA \leq 0.08$ . Apart from the above criteria, the test results must also ensure the synthetic reliability  $> 0.6$ ; Average Variance Extracted must be greater than 0.5.

## RESEARCH RESULTS

### The results for research sample characteristics

Statistical results showed that more than half of the respondents who are students of University of Economics Ho Chi Minh City (57.5%). The others are students of other schools in the post-secondary education system (42.5%). About information on the number of friends on Facebook, from 250-500 people accounting for 30.7%, followed by 500-750 people accounting for 23.5% from 750-1000 and from 1000-1500 are about 10% of the sample in the survey, the other people are subjects with few friends are less than 50 people with 2%.

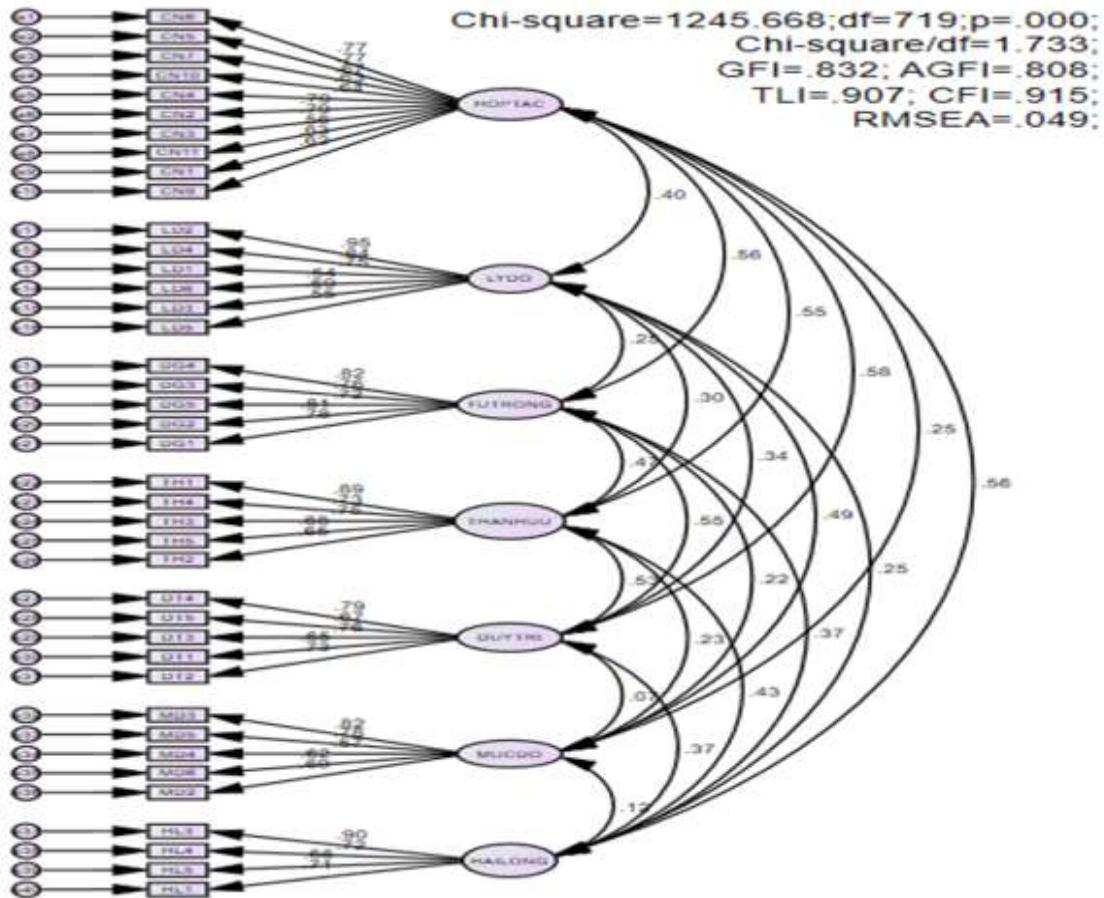
### Testing scale for concepts

Cronbach's Alpha test results showed that all Cronbach's Alpha values of the research components meet the requirements of this technique. They are including Cronbach's Alpha values in the range from 0.8-0.9. Specifically, the Cronbach's Alpha value of the components of the reason for using Facebook, the level of Facebook usage, self-esteem (also known as self-esteem), the level of satisfaction with the learning environment which is inherent, cooperative social capital and social capital maintained respectively 0.865; 0.822; 0.883; 0.862; 0.853; 0.899; 0.844. The correlation coefficients of the variable are all over 0.5.

Besides, the researchers continued to evaluate the scale through EFA analysis. The results of EFA analysis extracted 7 factors in accordance with the initial research model, Eigenvalues value and total extracted variance were 1,453 and 54,668%. In addition, Bartlett test results and KMO values showed that the data are consistent with the EFA factor analysis method ( $KMO = 0.93 \geq 0.5$  and  $p\text{-value}$  in Bartlett test  $< 0.01$ ).

The authors continued to use CFA affirmation analysis to test the relevance of the theoretical model to market information. The results of CFA analysis showed that most of the values of Chi-square/df, RMSEA, TLI, CFI, GFI, AGFI meet the criteria for a suitable model, namely Chi-square/df =  $1,733 < 2$ ;  $RMSEA = 0.049 \leq 0.08$ ;  $TLI = 0.907 \geq 0.9$ ;  $CFI = 0.915 \geq 0.9$ ;  $GFI = 0.832$  close to 0.9;  $AGFI = 0.808 \geq 0.8$ . In addition, the total reliability values (CR) and the total variance extracted (AVE) are greater than 0.5. This showed that the scale is rated as reliable. According to the analysis results of the CFA model estimation coefficients, all standardized coefficients are greater than 0.5 and all corresponding p-value of the non-standardized coefficients are not significant. The researchers compared to the significance level of 0.01; so the non-standardized

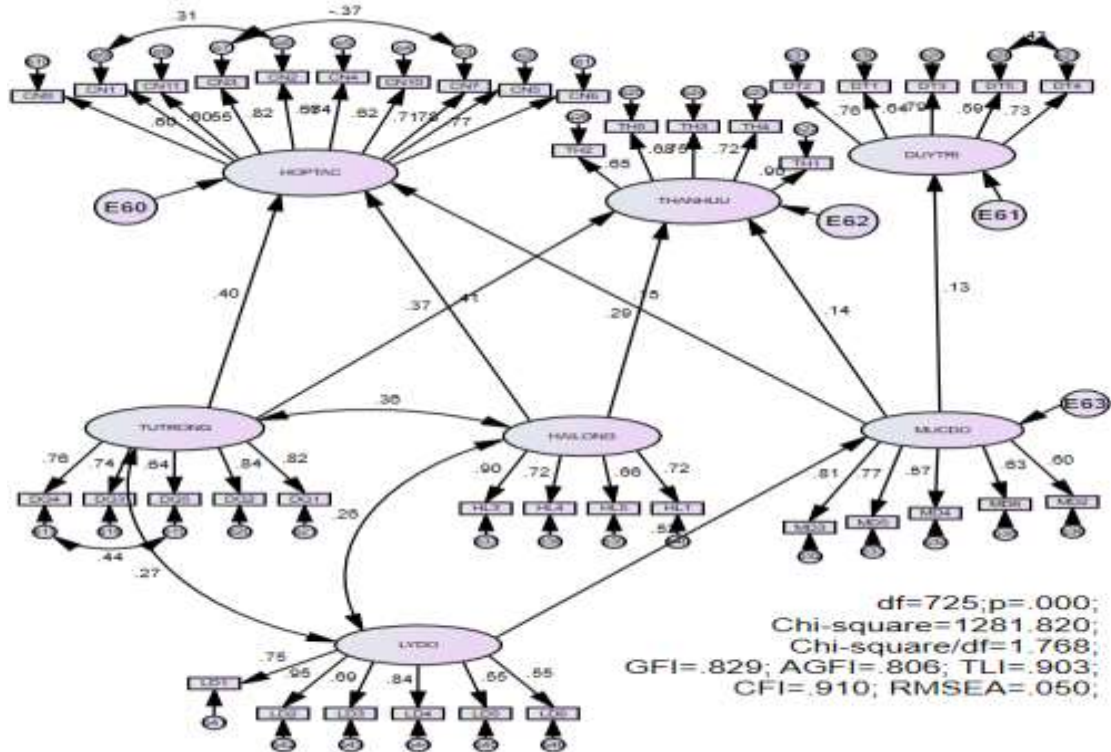
weights are statistically significant. Thus, the results of CFA analysis can conclude that the factors of convergence value. In addition, the correlation coefficient of each pair of concepts is significantly different from 1, so the components achieve discriminant values. The final CFA analysis results are presented in Figure 1 with all scales achieving value and reliability levels consistent with research data.



Source: The researchers processed by SPSS 20.0 and Amos

**Figure 1: The results of confirm factor analysis (CFA)**  
 Estimate relationships in structural model





Source: The researchers processed by SPSS 20.0 and Amos

**Figure 2: The results of estimating relationships in structural model**

The test results of the structural model presented in figure 2 showed that the model has the indicators suitable for market data (Chi-square/df = 1,968<2; CFI, TLI>0,9; GFI close level 0,9; RMSEA<0,8). The estimated results from the SEM model presented in table 1 show that the research relationships of the topic are statistically significant at the 95% confidence level, so hypotheses H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>, H<sub>4</sub>, H<sub>5</sub>, H<sub>6</sub>, H<sub>7</sub>, H<sub>8</sub> are all accepted.

**The results for SEM model estimation coefficient**

**Table 1: Coefficients from the structural equation modelling (SEM)**

Relationships		Standardized Coefficient	Unstandardized Coefficient	P
The level of using Facebook	<--- Reasons for using Facebook	0,508	0,516	***
Cooperative social capital	<--- Self-assessment	0,425	0,402	***
Friendship social capital	<--- Self-assessment	0,431	0,370	***
Friendship social capital	<--- The level of using Facebook	0,120	0,141	0,014
Social capital maintained	<--- The level of using Facebook	0,094	0,134	0,05
Cooperative social capital	<--- The level of using Facebook	0,113	0,146	***
Cooperative social capital	<--- Satisfaction	0,351	0,414	***
Friendship social capital	<--- Satisfaction	0,269	0,288	***

Source: The researchers processed by SPSS 20.0 and Amos

Table 1 showed that column "P" < 0,05 with significance level 0,05 and column "P" H<sub>1</sub>: supported; H<sub>2</sub>: supported; H<sub>3</sub>: supported; H<sub>4</sub>: supported; H<sub>5</sub>: supported; H<sub>6</sub>: supported; H<sub>7</sub>: supported and H<sub>8</sub>: supported.

## CONCLUSIONS & MANAGERIAL IMPLICATIONS

### Conclusions

The topic is one of the few studies in Vietnam to approach the concept of social capital research in a completely new context with both qualitative and quantitative methods. It is to consider the relationship between the current behavior of using social networks to form, develop and maintain quite important capital sources in the society today. Although Facebook is currently involved in the scandal of personal data abuse of 50 million Facebook users, there are 2.1 billion Facebook users, so it is giving up this social network is not easy to happen. The topic has reliable assessments on the relationship of social media use behavior, namely the relationship between the reason for using social networks and the level of social network usage. There is the relationship between extent of the use of social networks to the components that build up the concept of social capital including crony social capital, cooperative social capital and social capital maintained. In addition, the subjective of happy status of social network users also quite clearly affects the components of social capital in the new context that the topic deals. Therefore, the researchers had managerial implications for social capital following.

### Managerial implications

The use of Facebook in the current period is becoming increasingly popular at any generation, any age with online access. This means the risks involved in this "virtual" environment. Social capital is affected differently from this behavior and from that affects society. Therefore, it is in order to curb the negative aspects and develop the good aspects of social networks, relevant responsible state agencies and need flexible measures to guide these activities. Besides, information is transmitted on the Internet extremely quickly and attracts the attention of the public, so handling problems in online communities needs to be agile but smart and accurate.

The subjective of happy status significantly affects not only social capital but also many other problems of an individual. Therefore, it is for the student community, the school should coordinate with families and relatives of these subjects that have certain activities to attract students to participate, experience, meet and connect more. Therefore, each individual should focus on improving his or her happiness by working hard and doing his best. In this way, the initial capital of each individual will develop and thereby create benefits for surrounding connections as well as the whole society.

Finally, the study was conducted only in a community identified as young people with the habit of using social networks so the results of contribution to specific fields will not be clearly mentioned. Therefore, further research should focus on highly specialized communities, contributing a lot of personal value to society. In particular, social networks and online tools that are the source of big data for analysis, mining studies, but access issues have limited research. This should be a more considered social capital research direction for implementation in order to have a full view and to

have more breakthroughs in researching ongoing issue. In addition, the sampling method is conducted by the convenient method, the number is small and unevenly distributed among social sectors, so the representative sample is not high, the generality of the research results may be longer and not exactly. The next research can take a larger sample, the method of sampling according to probability combined with sample rate which will be more representative, the research results will be more accurate.

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