

A Study of the Need Hierarchy between Reality and Virtual Environments

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Abstract—A great deal of progress has been made on ICT society environment. Bases upon Information and Communication Technology, it will construct the virtual and electronic environment better and better. Virtual environment of Cyberspace can bring lots of personal benefits, enterprise, digital learning, and country competitiveness etc. However, is everything positive for kids to contact with virtual environment? We should face this progress carefully. Perhaps Virtual environment of Cyberspace may eventually destroy the current social system.

This questionnaire for the study used Freul's self concept, Carl Rogers's self concept, Maslow's Hierachy of needs and Bandura's social imitation. The samples were junior high school students in Kaohsiung city, Taiwan 2006. The sample and the survey were obtained from two stages of random sampling that was conducted using an Internet website. Students could read the online questionnaire in school's computer laboratory and then send immediate feedback to the website server.

The result of the experiment showed that the satisfied status of students in reality environment, the divergence of identification with Virtual ID, the Hierarchy needs in the virtual environment, and social imitation are existed between the virtual and reality environment.

Keywords—Virtual ID, Virtual environment, Social Imitate, Need of esteem, need of safety, need of social, need of self-actualization

I INTRODUCTION

BASED upon The Economist Intelligence Unit report in 2007, Taiwan's E-Readiness Rankings is top 17 among 69 main countries[1]. About the Connectivity and technology infrastructure category, the indicators were inclusive of Broadband penetration, broadband, affordability, mobile-phone, penetration, Internet, penetration, PC penetration,

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Wi-Fi hotspot penetration, Internet security and electronic ID. These indicators are the basic elements for the virtual environment. Taiwan is ranked as TOP 10 globally in this category. Through EIU report, as we know that Taiwan is developing as ICT society. It is enough to be the representative case to explore this issue.

Virtual environment (Cyberspace) was constructed by the electronic world, people uses PC, Broadband and Internet to communicate with others. Through this way, people could operate these tools as electronic commands to attain the goal as reality environment. For online game, people could login game by the virtual ID, gang other virtual IDs with, and play the game together. They probably know each other in the virtual environment, but they never meet in the reality environment. They can communicate with virtual ID in the cyberspace as the real world.

Until now, we still develop the skills about the Virtual Reality. Even we have the powerful skills to deceive our senses. However the most important issue is "Could people distinguish the real from virtual situation on their mind?" We need to think about this issue seriously before we enjoy the benefits from technology.

In the past, people communicated with others face to face, physically and personally in the reality environment. By using the telephone, only voices are transited through the telephone. They always used their sense organs to image the subjects. But now, people can create virtual identities to communicate with others in the cyberspace. They can login the chatting room, message board, discuss room, e-mail system and online game etc. Through the virtual ID, each could have behaviors in the cyberspace. Even though virtual ID was created and controlled by the users.

We need to explore the issue based on the above background. Such as virtual ID, Could it have possibility to develop the friendship with other IDs in the virtual world? Could people get the Hierarchy of Needs, when they created and controlled the virtual IDs in the virtual environment?

II DOCUMENT REVIEW

According to scholar "Freul" [2][7], he indicated three kinds of personality. The factors include ID, Ego, and Super ego. People will integrate above factors into the self-cognition from childhood to adults. If people can't integrate the factors very well, they might suffer the troubles from growing troubles. Scholar "Carl Rogers" [2] also take a similar views, he

distinguished the self-cognition into real self and ideal self. They have to integrate each other well. This research defined the Real ID as cognition of self in the reality environment. People must have ego and ideal with their Real ID. According to this, people can create and control the Virtual ID in the virtual environment, could they extend or appear their elements of self on the virtual ID? Until now, it is no suitable evidences to support it.

Scholar Maslow had provided the "Hierarchy of Needs". It included physiological need, need of safety, need of social, need of esteem, and need of self actualization. These needs present people's basic needs in the reality environment. People use real ID to satisfy basic Needs with others. These basic needs will support people to live better in the reality environment. According to this viewpoint, we may hypothesis that if people could extend or appear themselves in the virtual ID, could they get the basic needs from the virtual ID in the virtual environment?

Imitation is also another kind of behavior that can help people to learn easily. During the childhood, people constructed the self-cognition in reality environment. According to the scholar Bandura (1986), he provided the theory of social imitate. Students would learn experiences from modeling (Robert, 2003) [3]. So during the childhood, people could possible find some subjects to imitate. Through this behavior, it could help people to construct the cognition of them from the reality environment. Based upon it, we may hypothesis that if people could extend or appear themselves in the virtual ID, did they have virtual subject to imitate?

Based upon the above framework, the hypotheses propose as following:

- 1) To explore the satisfied status of students in reality environment
- 2) To explore the satisfied status between reality environment and Cyberspace
- 3) To explore the correlation between "The satisfied status of students in reality environment" factor and "The satisfied status of reality environment was more than Cyberspace" factor
- 4) To explore the cognition of self
- 5) To explore Hierarchy of needs in Real & Virtual environment
- 6) To explore Imitational subject in Real & Virtual environment
- 7) The correlation among "Hierarchy needs", "Identification in virtual environment", "Friends from the virtual environment", and "Imitative subject in virtual and reality environment"

III METHODOLOGY

A. Subjects

The subjects of this study were junior high school students studying in Kaohsiung city, Taiwan. Kaohsiung city covers an

area of 153.59 square kilometers with the population 1.5 millions. She was 2th directly controlled municipalities major cities in Taiwan. Beside it, Kaohsiung city have the global harbor which its freight handled volume ranked as top 6 globally.

B. Questionnaire

This study's questionnaire was completed through website. Likert 5 points scale was used. They are "1. Fit at all", "2. Fairly Fit", "3. Neuter", "4. Not Fairly Fit" and "5. Not Fit at all". The survey also included Freul and Carl Rogers's cognition of self, Maslow's Hierarchy of needs and Badura's social imitate. About the scale, the 5 points mean

A pre-test was done prior to the formal test. The pre-test reliability for cognition reached 0.91. The total cumulative was reach 53.3%.

This study's subjects were junior high school students in Kaohsiung, Taiwan. Two stages random sampling were applied. In the first stages, class's size was used as sampling unit and the schools were selected by random. Therefore, 10 schools were picked in Kaohsiung city.

In the second stage, from each grade 7 to 9, 1 class was selected from stratified cluster sampling. "Class" (about 1,050 students) was examined as a sampling unit. Finally, they have 952 students to be analyzed that the rate was 90.7%.

C. Statistics

This method of statistics adopted the percentage, Pearson Product-Moment correlation to test the hypotheses.

IV RESULTS AND DISCUSSION

Based upon the results, we discussed in identification of ID, hierarchy of needs, and social imitate between virtual and reality environment.

A. The satisfied status of students in reality environment

This table I would like to focus attention on situation of the satisfied status that students felt in reality environment, and comparing satisfied status between cyberspace and reality environment.

There is one thing that is important for the Means in Kaohsiung city. The Mean ($M=3.41$, $SD=.50$) had over the median- Neuter (3). The result fits in with our empirical thinking. What kind of the elements could influence the satisfied status of students in reality environment? There is room for further investigation in the ICT society, but this has no connection with the main subject.

Compared with the satisfied status between the reality environment and Cyberspace, the Mean ($M=3.39$, $SD=.74$) had over the median- Neuter (3). That is to say that students satisfied in reality environment would be better than Cyberspace. It fits in with our empirical thinking also.

The purpose of this study would like to explore the correlation between "The satisfied status of students in reality

environment” factor and “The satisfied status of reality environment was more than Cyberspace” factor. It was indicated that Kaohsiung ($r=.477$, $p<.01$) had present median significant correlation between two factors. We could say that the more satisfied status in reality environment, the more the more satisfaction that students were in reality environment

TABLE I

THE SATISFIED STATUS BETWEEN CYBERSPACE AND REALITY ENVIRONMENT

		THE SATISFIED STATUS OF STUDENTS IN REALITY ENVIRONMENT (A)	THE SATISFIED STATUS OF REALITY ENVIRONMENT WAS MORE THAN CYBERSPACE (B)	CORRELATION BETWEEN A & B
KAOHSIUNG	M	3.41	3.39	.477**
(TAIWAN)	SD	.50	.74	

** $p<.01$, PEARSON CORRELATION

after comparing Cyberspace and reality environment.

B. The cognition for Real & Virtual ID

According to Table II, students felt that they had virtual IDs that could represent themselves. 82.2% students agreed this viewpoint. Especially, 66.4% chosen “fit at all”. And only 6.8% disagree. So we could say that most students could possible catch the concept of virtual IDs.

As Freul and Carl Rogers indicate the concepts of self which includes idea self, ego and super ego. According to the survey, 40.9 % students satisfied their behaviors in the virtual environment (reality environment was 40.6%). And 38.8% students had dreams to practice in the virtual environment (reality environment was 69.5%). When we compared the results with the real and virtual environment, we see the satisfied degree is almost the same. About the dreams to practice, virtual environment is less than reality environment. It meant the virtual ID still could not be the same as real ID in

TABLE II
COGNITION OF SELF

QUESTION	% FIT AT ALL/ FAIRLY FIT	% NOT FAIRLY FIT/ NOT AT ALL
I HAD OWNED THE VIRTUAL (INTERNET) ID THAT COULD REPRESENT SELF.	82.2	6.8
SELF-BEHAVIOR SATISFACTION IN THE REALITY ENVIRONMENT	40.6	14
SELF-BEHAVIOR SATISFACTION IN THE VIRTUAL ENVIRONMENT	40.9	11.2
I HAD DREAMS TO PRACTICE IN THE REALITY ENVIRONMENT	69.5	5.7
I HAD DREAMS TO PRACTICE IN THE VIRTUAL ENVIRONMENT	38.8	20.1
I ALWAYS GOT THE PRAISES FROM TEACHERS, FAMILIES, AND CLASSMATES IN THE REALITY ENVIRONMENT.	40.7	16.8
I ALWAYS GOT THE PRAISES IN MY ABILITY FROM THE PEOPLE OF VIRTUAL	27.8	29.2

dream to practice. About the praises from their ability, 27.8% students could get the praises from virtual environment, 40.7% from reality environment. It means that the virtual ID could not be the same as real ID in getting praises.

As mentioned above, we know the virtual ID could have dream to practice and get the praises from virtual environment. In other word, virtual ID could not be the same as real ID in ego, super ego, and ideal self. Even though virtual ID can not be the same as real ID, we can't ignore the existent evidence of virtual ID. In that case, students can extend or appear themselves in the virtual ID. And then students could possible get the mental compensation from the virtual ID.

Shown in Table III, we can find the evidence that 62.8% students used the virtual ID to interact with others. Students can chat and communicate with others in virtual ID. The most special point is that students can use virtual ID to interact with others whom never meet in real world before. Their own experiences interact with strangers in virtual world is 36.4%. And their friends' experiences are 41.6%. That is to say students can operate their virtual IDs to interact with others' virtual IDs in the virtual environment. In the cyberspace, we can find the interactive behaviors among the virtual IDs. It means that part of virtual behaviors could be processing as reality environment.

TABLE III

INTERACTION WITH PEOPLE WHOM HAD NEVER MET FACE TO FACE

CHOICE	% FIT AT ALL/ FAIRLY FIT	% NOT FAIRLY FIT/ NOT AT ALL
EXPERIENCES TO CHAT AND COMMUNICATE BY USING VIRTUAL ID WITH OTHERS (WORD OR SOUND).	62.8	15.6
EXPERIENCES TO CHAT AND COMMUNICATE WITH OTHERS WHOM HAD NEVER MET FACE TO FACE BEFORE BY USING VIRTUAL ID.	36.4	38
EXPERIENCES OF FRIENDS ALWAYS CHAT WITH PEOPLE WHOM HAD NEVER MET IN THE VIRTUAL ENVIRONMENT.	41.6	21.8
HOW MANY SUBJECTS (NEVER MET FACE TO FACE) DID I ALWAYS CONTACT IN VIRTUAL ENVIRONMENT?		
PERSON	0	1-3
	4-6	7-9
	10-11	
SUM %	64.5	18.7
	8.4	1.4
		6.9

64.5% virtual world students didn't meet each other in real world. So 35.5% students had subjects (never met face to face) to contact with in virtual environment. And they could find that half of students (have subjects) had 1-3 subjects to interact.

Represented in Table IV is the comparison table of the virtual and real ID. It presents that 33.2% students feel their appearance in virtual and real ID are the same. However, 27.1% students feel not fit. In addition to this, 24.4% students satisfy their virtual ID more than real ID. It is clear that the satisfaction by using virtual ID can be possible better than real ID. We may say that part of students get ego, super ego, ideal self from the virtual ID, they would get more from

virtual ID than real ID.

As above mentioned, some students can possibly make some behaviors that never appear or succeed in students' reality environment. Through the survey, we know that 38.2% students can present the recessive thinking behaviors within their virtual ID.

Added to this, 61.3% students feel their virtual IDs are important, only 10.5% students feel virtual IDs are not important. That is to say that student can't ignore the virtual ID in the virtual environment.

So we may say that virtual IDs are important for students. Students possibly extend or appear themselves in their virtual ID. Maybe these behaviors are never appeared in real ID. Based upon it, students can contact with others by using virtual ID in the virtual environment. During the childhood, it

TABLE IV
COMPARISON TABLE OF VIRTUAL ID AND REAL ID

CHOICE	% FIT AT ALL/FAIRLY FIT	% NOT FAIRLY FIT/NOT AT ALL
THE SAME APPEARANCE OF MY REAL AND VIRTUAL ID.	33.2	27.1
MORE SATISFACTION OF MY VIRTUAL ID IS MORE THAN REAL ID.	24.4	36.3
THE BEHAVIORS OF MY VIRTUAL ID PRESENTED THE RECESSIVE THINKING.	38.2	25.2
I WAS ATTACHED IMPORTANCE TO MY VIRTUAL ID.	61.3	10.5

is golden time for students to integrate their cognitions in the reality environment. After they grow up big enough, they just use virtual ID in virtual world. But now, they contact with virtual environment early. Could students separate clear from virtual ID to real ID in the ICT society? It is worth to keep exploration in the future.

C. Hierarchy of needs in Real & Virtual environment

This research adopted the Maslow's hierarchy of needs. It included need of safety, need of social, need of esteem, and need of self actualization. Table 4 has shown the evidence of hierarchy of needs in real and virtual environment.

First, this research has evidence to show the need of safety in table 4. 32.8% students could feel safe when they used the virtual ID. Why should we note these evidences? In the virtual environment, people could extend or appear themselves in the virtual ID. And then they used virtual IDs to interact with other's virtual IDs. It is the mediate process for people to contact with others. According to the medium, people keep the covert in the virtual environment. As we know, the more computer skill people have, the more covert they can do it. The subjects are the junior high school students. We could expect students' ability improvement in the future. And then they will have more ability to keep the covert in the virtual environment. So when we focus on the 32.8% junior high school students whom can feel safe, we can't ignore this evidence.

Especially, when students used the virtual ID, 43.7% students can feel that they can hide their looks and defects in the virtual environment. This rate is also the strong evidence to show that people could possible get the safety need by using the virtual ID.

TABLE V
HIERARCHY OF NEEDS

CLASSIFICATION	CHOICE	(%) FIT AT ALL/FAIRLY FIT	(%) NOT FAIRLY FIT/NOT AT ALL
NEED OF SAFETY	I FEEL SAFE BY USING VIRTUAL ID BECAUSE NO ONE KNOWS MY REAL SELF IN VIRTUAL ENVIRONMENT.	32.8	24.8
	BY USING VIRTUAL ID, I COULD HIDE MY LOOKS AND DEFECTS.	43.7	18.5
NEED OF SOCIAL	FRIENDS IN VIRTUAL ENVIRONMENT TAKE CARE MORE THAN FRIENDS IN REALITY ENVIRONMENT.	21.0	38.3
	HAVE THE SENSE OF BELONGING WHILE USING THE VIRTUAL ID.	35.9	27.7
NEED OF ESTEEM	I ALWAYS GOT THE PRAISES FROM TEACHERS, FAMILIES, AND CLASSMATES IN THE REALITY ENVIRONMENT.	40.7	16.8
	I ALWAYS GOT THE ABILITY PRAISES FROM THE PEOPLE OF VIRTUAL ENVIRONMENT.	27.8	29.2
	BEHAVIOR SATISFACTION IN THE REALITY ENVIRONMENT	40.6	14
	BEHAVIOR SATISFACTION IN THE VIRTUAL ENVIRONMENT	40.9	11.2
NEED OF SELF ACTUALIZATION	DREAMS TO PRACTICE IN THE REALITY ENVIRONMENT	69.5	5.7
	DREAMS TO PRACTICE IN THE VIRTUAL ENVIRONMENT	38.8	20.1
	EAGER TO GROW AND DEVELOPMENT SELF POTENTIAL IN THE REALITY ENVIRONMENT.	71	7.5
	EAGER TO GROW AND DEVELOPMENT SELF POTENTIAL IN THE VIRTUAL ENVIRONMENT.	44.5	13.7

Secondly, when we focus on the need of social, the evidence show that 21.0% students feel their friends from virtual environment had taken more care than reality environment. 1 in 5 students feels his friends from virtual environment are better than reality environment.

And there is another reason that 35.9% students can feel the family love, groups or cyberspace when they use the virtual ID. In another way, people use the virtual to extend or appear themselves in the environment. Furthermore, people can get the feeling of belonging when they using the virtual ID.

For the reasons mentioned above, these will be the evidence to show students could be possible to get the need of social from the virtual environment.

Thirdly, we may indicate about Need of esteem in table 4. We can note that only 40.7% students can get the praises from teachers, families, and classmates in real world, but 16.8% students disagree. Comparing with the virtual environment, the rate decreases from 40.7% to 27.8%. But in another word, 1 in 3 students almost gets the praises from the virtual environment. We need to notice that how often do students stay in virtual environment once a day? Most students spent 10 hours staying in school for learning. It is common for students in Taiwan. And then students need to spend more time on the need of physiological including meal and sleep. Generally speaking, students spent more time on reality environment more than in virtual environment. However, 27.8% students can feel the praise from friends in virtual environment.

Another point to be noted is that students feel satisfaction on their behaviors whatever in real or virtual environment.

So we may say that students could possible get the need of esteem in the virtual environment.

Fourthly, the point to observe is the need of self-actualization. 69.5% students have dream to practice in the reality environment. The rate is more than virtual environment (38.8%). About the aspired the growing and developed the potential themselves, the situation is also the same between real and virtual environment. The rate of reality environment is 71% more than virtual environment (44.5%) that students can get the feeling from.

According to theory from Freul and Carl Rogers, students will have super ego and ideal self. It is nature craving for students to aspire growing and develop the potential themselves. The evidence is stronger to show students have the natural craving in the reality environment. But why do students have to present stronger degree in the virtual environment? Reflection on some of these points will make clear that virtual environment is more than tools. When people create the virtual IDs, they can extend or appear themselves in the virtual IDs. And then through the virtual ID, people could have social interaction in the cyberspace. In other word to say, people could be possible to construct the virtual society in virtual environment. Virtual society must be based upon the virtual IDs that extend or appear themselves.

It follows from what has been said that people could be possible to get the Hierarchy of Needs in “need of safety, need of social, need of esteem, and need of self actualization” in the virtual environment.

D. Imitational subject in Real & Virtual environment

According to the theory of social imitate from Bandura, Students would learn experiences from modeling subjects. As we know, students will have the super ego and ideal self in life. They will observe and judge from people to catch the ideal image by themselves. And then they will develop and imitate toward their ideal images through imitational subjects.

Table 5 may indicate the situation about the imitational subjects in real and virtual environment. This research finds that 54.2% students had been imitating somebody in the reality environment. The rate is higher than virtual environment (21.4%). When we use another way, 1 in 5 students had the experiences to imitate somebody. In addition to this, the 18.7% students felt their speaking or behavior had been imitated in the virtual environment.

We can't ignore this evidence that students would be possible to imitate about “how to create, extend or appear themselves within the virtual ID from the imitation.”

Table VI also indicates the numbers of imitative subject. 39.3% students have over 10 imitational subjects in the reality environment is the highest percentage. But in the virtual environment, 38.1% students have 1-3 imitational subjects. As we know, students spend more time on reality environment. So the evidence explains that 39.3% students

had over 10 imitational subjects in the reality environment.

TABLE VI

IMITATIVE SUBJECT IN REALITY ENVIRONMENT AND VIRTUAL ENVIRONMENT					
CHOICE	% FIT AT ALL/ FAIRLY FIT			% NOT FAIRLY FIT/ NOT AT ALL	
EXPERIENCES TO IMITATE SOMEBODY'S SPEAKING OR BEHAVIOR IN THE REALITY ENVIRONMENT	54.2			13.9	
EXPERIENCES TO IMITATE SOMEBODY'S SPEAKING OR BEHAVIOR IN THE VIRTUAL ENVIRONMENT	21.4			48.8	
EXPERIENCES TO BE IMITATED OF MY SPEAKING AND BEHAVIOR BY SOMEBODY IN THE REALITY ENVIRONMENT.	32.6			28.1	
.EXPERIENCES TO BE IMITATED OF MY SPEAKING AND BEHAVIOR BY SOMEBODY IN THE VIRTUAL ENVIRONMENT.	18.7			48.1	
HOW MANY SUBJECTS HAVE I BEEN IMITATED IN REALITY ENVIRONMENT?					
PERSON	0	1-3	4-6	7-9	OVER 10
SUM %	38.2	18.1	8.9	4.6	39.3
HOW MANY SUBJECTS HAVE I BEEN IMITATED IN VIRTUAL ENVIRONMENT?					
PERSON	0	1-3	4-6	7-9	OVER 10
SUM %	39.1	38.1	12.9	1.0	9.0

But why do 38.1 % students have 1-3 imitational subjects in the virtual environment? If virtual environment is just only the tools, students are impossible to have the imitative subject from it.

This is also good evidence to show the virtual environment is not only tools. Virtual society could possible exist in the cyberspace that based upon the virtual environment. From this viewpoint, we may say that the more imitational subjects they have, the more identification they have in virtual society.

E. The correlation among “Hierarchy needs”, “Identification in virtual environment”, “Friends from the virtual environment”, and “Imitative subject in virtual and reality environment”.

a. Identification with Virtual ID from virtual environment would be influence upon Hierarchy of need in the virtual environment.

This study would like to focus attention on the correlation between “identification with virtual ID” and “virtual ID satisfies “more than real ID”. The result presents the highly significant correlation ($r = .717$, $p < .001$). The result of the test rejects the hypothesis H1. It may say that the more identification with virtual ID, the more satisfaction with virtual ID than real ID.

This study had shown the correlation significantly between “identification with virtual ID” and “Hierarchy of needs in the virtual environment”. They present the highly significant correlations from .639 to .794 ($p < .001$) in Hierarchy of needs which including need of safety, need of social, need of esteem, and need of self actualization in the virtual environment. The result of the test rejects the hypothesis H2.

Comparing with the Hierarchy of needs in real and virtual environment, the results are different. The first point we

notice is the correlation between “need of social in reality environment” and “identification with virtual ID.” It presents the opposite result. In other word, it may say that the more identification with virtual ID, the less need of social students have in reality environment. It is obvious that if students could not get the need of social in the reality environment, they would possible evade the reality environment to addict the virtual environment. And identification with Virtual ID would be influenced upon Hierarchy of need in the virtual environment

b. Identification with friends from Virtual environment will be influence upon Hierarchy of need in virtual environment.

They have correlation between “Identification with friends from virtual environment” and “virtual ID satisfies more than real ID” The result presents the highly significant correlation ($r = .602, p < .001$). The result of the test rejects the hypothesis H3. It may say that the more identification with friends from virtual environment, the more satisfaction with virtual ID than real ID.

What the passage makes clear at once is that the correlations were significantly found between “identification with friends from virtual environment” and “Hierarchy of needs in the virtual environment.” They present the significant correlations from .541 to .729 ($p < .001$) in Hierarchy of needs which includes need of safety, need of social, need of esteem, and need of self actualization in the virtual environment. The result of the test rejects the hypothesis H4. As we know, need of social mean that people need friends, family, groups, society, and so on. So we can see that the correlation with friends in virtual environment is the highest percentage. More noteworthy that the need of social in reality environment presents the opposite result that is the highly opposite significant correlation with identification with friends from virtual environment.

Judging from the above, it is the same result with last paragraph. If students could not get the need of social in the reality environment, they would possible evade the reality environment to addict the virtual environment. And identification with friends from the Virtual environment will be influenced upon the Hierarchy of need in virtual environment.

c. Identification with imitative subject from the virtual environment will be influence upon Hierarchy of need in the virtual environment

This study would like to focus attention on the correlation between “Identification with imitative subject from virtual environment” and “Virtual ID satisfies more than real ID.” The result presents the highly significant correlation ($r = .602, p < .001$). The result of the test rejects the hypothesis H5. It may say that the more identification with imitative subject from virtual environment, the more satisfaction with virtual ID than real ID. Comparing with the “Identification with imitative subject from reality environment”, the correlation is lower that we can ignore it.

This study may indicate the correlation between “Identification with imitative subject in virtual environment” and “Hierarchy of needs in the virtual environment.” It

presents the significant correlations from .361 to .582 ($p < .001$) in Hierarchy of needs which including need of safety, need of social, need of esteem, and need of self actualization in the virtual environment. The result of the test rejects the hypothesis H6. When we focus on “Identification with imitative subject in reality environment”, the result is the significant correlation. But it presents the lower correlation.

This is especially noteworthy in the case of correlation between “Identification with imitative subject” and “Need of self actualization”. We can see that they had middle significant correlation (expect Need of self actualization in reality environment and Identification with imitative subject in virtual environment).

For reasons mention above, identification with identification with imitative subject in virtual environment will be influenced upon the Hierarchy of need in virtual environment.

It should be concluded above that “Identification with Virtual ID”, “Identification with friends from virtual environment” and “Identification with imitative subject from virtual environment” would be influenced upon Hierarchy of need in the virtual environment.

V CONCLUSION

According to the Scholar Liu Z. brought Emotion interaction of virtual character in 3D artificial society up. 3D virtual characters interact with emotion and construct a 3D artificial society (Liu Z)[4][5]. According to his architecture of 3d virtual character, he addressed the mental variables that include the Emotion, Personality, and Motivation. So this research also uses the similar directions to explore the mental level.

Information Communication Technology is the tool to help people to improve their life. But when we extend or appear ourselves in the virtual ID, interact with others in the cyberspace. It could become the concept of virtual society. When we have more tools and abilities to construct the virtual environment, could people still distinguish clear from virtual to real? Could they distinguish clear about “Do their mind control the Technology or Technology control their mind? These are the very important issues. According to finding, the more satisfied status in reality environment, the more the more satisfaction that students were in reality environment after comparing Cyberspace and reality environment. If students dissatisfied with the reality environment, it would have more possible that Virtual environment is better than reality environment.

Through this research, it tries to adopt the mental theories to explore the ICT society problem. It could find some points that:

- 1) Students satisfied in reality environment would be light better than Cyberspace.
- 2) The more satisfied status in reality environment, the more the more satisfaction that students were in reality environment after comparing Cyberspace and reality environment.

- 3) Most of students identify the importance of the concept of virtual ID and feel virtual ID. They could possible extend or appear themselves in the virtual ID.
- 4) Students could possible present the behaviors of recessive thinking by using their virtual ID in the virtual environment.
- 5) Students could possible have dream to practice and get the praises by using the virtual ID from the virtual environment.
- 6) Students can use the virtual ID to interact with others whom never meet face to face before.
- 7) Students could possible catch the hierarchy of need by using the virtual ID from the virtual environment..
- 8) The more identification with virtual ID, the more satisfaction with virtual ID than real ID.
- 9) Identification with Virtual ID from virtual environment would be influenced upon Hierarchy of need in the virtual environment.
- 10) Identification with friends from Virtual environment will be influence upon Hierarchy of need in virtual environment.
- 11) Identification with imitative subject from the virtual environment will be influenced upon Hierarchy of need in the virtual environment.

Until now, the government still continues investing ICT to keep the country competitiveness. Enterprise, government, education, and family adopt the virtual environment and interact in the cyberspace. Would people still distinguish clear from the virtual and real ID in the future? This is a serious issue in the ICT society.

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