

**Gratification, Self-Esteem and Online Message Board Use  
by Women**

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## **Abstract**

This exploratory research examined the online message board usage pattern amongst 384 female Internet users using an online questionnaire. Specifically, it focuses on the effects of gratifications, demographics, and self-esteem on frequency of online message board use. Results show that the general benefits, social sharing, education, and being a student are significant predictors for the frequency of online message board use. In addition, it is argued that online message board use can serve as a source of positive social support, and in turn, it may boost self-esteem. However, self-esteem is only an approaching significant factor to predict the frequency of online message board usage.

## **Introduction**

Global Internet penetration now stands at almost 10 per cent of the world population according to NUA and Nielsen//Netratings. 580.78 million people now have access to the Internet (2002). That is a rise of 173.68 million since the end of 2000. NUA forecasts that the number of worldwide Internet users will reach one billion by 2005. In Hong Kong, nearly 60% of the population has access to the Internet (NUA, 2002); it ranked number four in online penetration markets.

Female Internet users are challenging men's position as the largest group of Internet users (Nielsen//Netratings, 2002). From April 2001 to April 2002, females, as a percentage of at-home users on the Internet, increased in 24 out of the 25 countries surveyed, with women now outnumbering men on the Internet in the US and Canada by 52% to 48%. The percentage of at-home Internet users who are women grew by 2.3 percent to 45.1 percent in Hong Kong. Women in Hong Kong spent 17 percent more time online (2002).

Participated in online message board is the number four online activity in Hong Kong, according to Nielsen//NetRatings Global Internet Trends report (2002). Online users of age 16 or above, 28% participated in online message boards over the past six months in Hong Kong, compared to 84% sent/received email, 38% used radio via the Internet, 34% looked at audio-visual content, and 26% used instant messaging.

In Hong Kong, there are websites targeting female with online message boards. Although there is no research figure, the popularity of online message board could be demonstrated by the number of posts and topics. As of April 13 2004, there were a total of 339,939 posts in 28,643 topics at the online message board featuring with wedding and marriage at [www.esdlife.com](http://www.esdlife.com). The top 2 topics in the online

message boards at [www.she.com](http://www.she.com) were: related to sex with 43,175 posts and related to relationship with 21,892 posts. People need to register to become a member in order to post a message in the online message boards. Either members or visitors could read the message; members could ask for help, sharing their opinions and experience by posting the message at the online message boards. It becomes a community for the people to interact and to share in the cyberspace.

Traditionally, communities were viewed as groups of people who live in the same geographic area and follow the same set of behavioral rules. They are people who have physical access to each other and can talk to each other and interact in face-to-face meetings. Talking, in this context, refers to the spoken word and all of the nonverbal gestures that support conversation. Oral language is the bond that brings members of the traditional community together. But with the widespread use of computer network, people can now talk to each other through the written word in the form of virtual communities.

Originally, communication researchers thought that the cues filtered out by the medium would make it impersonal. In contrast to these expectations, Rheingold (1993) described how a variety of people could come together to form a virtual community. "My direct observations of online behaviour around the world over the past ten years have led me to conclude that whenever CMC technology becomes available to people anywhere they inevitably build virtual communities with it, just as microorganisms inevitably create colonies" (Rheingold, 1993, p.6). He defined virtual communities as "social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace." (Rheingold, 1993, p.5)

Simply stated, Rheingold believes that Internet communities are informational and emotional support groups. As communities, these groups act as connection points for gathering people with common beliefs and ideas. As a result, shared beliefs replace physical presence as a common bond (Barnes, 2001, p. 160)

By altering our conceptions of space, the Internet has provided new opportunities for people to socialize. Socialization can take forms such as interpersonal online dating and small group communication. When small group members spend enough time together to build emotional bonds, the group can begin to consider itself a “community” (Barnes, 2001, p.159). Although members meet in the perceptual space created by computer networks, they behave as if the group met in a physical space.

The sociological term community should be understood as (1) a group of people, (2) who share social interaction, (3) and some common ties between themselves and other members of the group, and (4) who share an area for at least some of the time (Hillery, 1955).

In Hamman’s study (1998), most respondents likened AOL to a “third places”. On AOL, thousands of chat rooms and other forms of electronic communication are replacing the physical “third place”. Oldenburg (1997) writes of the decline in publicly accessible space for informal association amongst community members to occur. He calls these places “the great good place” because, in his view, such places are “the core settings of informal public life” (Oldenburg, 1997 p.16). The “great good place” exists as a third place in the lives of community members, following the first place (home), and the second place (work). The aspects of Oldenburg’s third place such as inclusiveness, lack of class boundaries, and a

relatively high amount of freedom to do and say as one sees fit, are all readily apparent in cyberspace where the users are safe from physical threats (Goby, 2003).

This exploratory study investigates why women in Hong Kong participate in the online discussion boards: with specific emphasis on relationships between motivations, self-esteem, and the use of online discussion boards.

### **Uses and Gratifications Theory**

Uses and Gratifications theory has provided a framework for examining the satisfaction of needs and interests through different forms of communications media (Katz, Blumler & Gurevitch 1974). Uses and Gratifications emphasis on the use of mass media presupposes an “active” audience, that is, one that makes decisions about media consumption with the intent of attaining goal. As stated in the classic volume on uses and gratifications, Katz, Blumler and Gurevitch (1974) described the approach as (1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones (p. 20).

With the rise of new media technologies, contemporary researchers applied uses and gratifications to examine the relationship between the new media and traditional media in terms of different gratifications people expected or obtained. As new communication technologies enhance the opportunities for individuals to choose their personal media use and experience, Uses and Gratifications theory lends researchers some insights into how the "new" media differ from the "old" as far as audiences are concerned and how the new media influence the use of traditional

media (Williams, Strover and Grant, 1994).

Rafaeli (1986) found that users of electronic bulletin boards felt "recreation, diversion, and entertainment" as the principal motivation for use, followed by "communications" and "learning what others think." In recent years, uses and gratifications theory has also been used to examine the audience experience of Web sites. Eighmey and McCord (1998) examined a variety of issues concerning Web interaction, such as entertainment value, personal involvement, personal relevance, information involvement, clarity of purpose, controversy, credibility, interest in continuing communication, and purchase interest. Korgaonkar and Wolin (1999) suggested seven motivations and gratifications in terms of web usage: social escapism motivation, transaction-based security and privacy concerns, information motivation, interactive control motivation, socialization motivation, transactional privacy concerns and economic motivation.

Based on the uses and gratifications theory, the following research question is raised:

***RQ1: What are the motives or reasons for women in Hong Kong to participate in online discussion boards?***

### **Self-esteem**

Maslow (1970) proposed that there is a hierarchy of needs, ascending from the basic biological needs to the more complex psychological motivation that become more important only after the basic needs have been satisfied. The needs at one level must be at least partially satisfied before those at the next level become important determiners of action. Esteem need is to achieve, be competent and gain approval and recognition.

William James (1890) suggested that the tendency to strive to feel good about oneself is a fundamental aspect of human nature. Self-esteem is literally defined by how much value people place on themselves. It is the evaluative component of self knowledge. High self-esteem refers to a highly favorable global evaluation of the self. Low self-esteem, by definition, refers to an unfavorable definition of the self (Baumeister, Campbell, Krueger and Vohs, 2003). Bednar, Wells and Peterson (1989) proposed that self-esteem is subjective feedback about the adequacy of the self. The feedback – self-esteem – is positive when the individual cope well with circumstances but negative when he or she avoids threats. In turn, self-esteem affects subsequent goal achievement; high self-esteem increasing coping, and low self-esteem leads to further avoidance.

Baumeister and Leary (1995) show that there is strong motivational basis for people to feel connected to others and to fulfill the need to belong. Another basic need is to have positive feelings about oneself, that is, self-esteem and a sense of self-worth (Steele, 1998). Low self-esteem is often the result of a lack of unconditional parental and peer support, which creates feelings of inadequacy (Harter, 1993).

### **Self-Esteem System as a Sociometer**

According to sociometer theory, self-esteem is essentially a psychological meter, or gauge, that monitors the quality of people's relationship with others (Leary, 1999; Leary & Downs, 1995). The theory is based on assumption that human beings possess a pervasive drive to maintain significant interpersonal relationships, a drive that evolved because early human beings who belonged to social groups were more likely to survive and reproduce than those who did not (Baumeister & Leary, 1995).

Specifically, a person's feelings of state self-esteem are an internal, subjective index or marker of the degree to which the individual is being included versus excluded by other people and the motive to maintain self-esteem functions to protect the person against social rejection and exclusion. In everyday life, inclusion-exclusion and interpersonal evaluations are highly confounded. We tend to associate with those we regard positively while avoiding those we regard negatively. To the extent that social evaluations are closely related to inclusion and exclusion (Baumeister & Tice, 1990), people's self-esteem is often affected by evaluative feedback. Leary, Tambor, Terdal and Downs (1995) suggested that the degree to which others appear to include versus exclude the individual, rather than the nature of other's evaluations per se, is the most important determinant of self-esteem. Furthermore, in behaving in ways that promote self-esteem, people are striving to enhance their inclusionary status rather than to be evaluated positively per se.

In summary, the self-esteem system appears to function as a sociometer designed to detect possible deleterious changes in people's inclusionary status. Rather than serving primarily to maintain one's inner sense of self, the self-esteem motive prompts people to behave in ways that maintain their connections with other people. Rohall and Cotten (2002) suggest that if the Internet gives us more freedom to choose interactions, it makes sense that we would look for the most positive feedback. Further, we can quickly eliminate less desirable interactions while increasing time and exposure to positive interactions.

### **Internet Usage and Self-esteem**

Young (1996) suggests that people who rely heavily on the Internet are those who experience low self-esteem and rejection. These people see the Internet as a

place to express their buried emotions and find support and people with common interests, problems and concerns. Self-esteem has been linked to the Internet addictive behaviour. Young (1997) also found that moderate to severe rates of depression co-exist with pathological Internet use. It is plausible that depressives who suffer from low self-esteem, a fear of rejection and a high need for approval use the Internet in order to overcome this real life interpersonal difficulties through social community building generated through CMC.

Colwell and Payne (2000) obtained a negative relationship between self-esteem and frequency of computer game play for boys. Boys, who are more frequent computer game player, are with low self-esteem. Papacharissi and Rubin (2000) found that those who felt less satisfied and valued in face-to-face communication used the Internet as an alternative to interpersonal communication.

On the other hand, Katz and Aspden (1997) found that people who formed friendships over the Internet had higher level of extroversion, sociability and willingness to take risks. Individual high in sociable or those with larger traditional social networks may continue their sociable behaviour and desire for social contacts online (Joe, 1997). Morgan and Cotten (2002) found that Internet usage for communication purposes was associated with decreased depressive symptoms, while non-communication usage was related to increase depressive symptoms amongst college freshmen.

Rohall and Cotton (2002) suggested that using the Internet for communication purposes allows for the development and maintenance of affective social ties. The Internet can act like any other medium, it can act as a conduit for social interaction, such as the telephone, or it can limit social interaction, such as watching television. Cotton (2001) and Preece (2000) suggest that online communication allows for the

development of computer-mediated support (support that is exchanged via email, chat rooms, message board, etc.) that may buffer the negative effects of stressful life circumstances. Prior studies show that people experiencing stressful life events receive vital support from computer-mediated communication, and particularly from online communities (Ickes, 1997; Preece, 2000). Shaw and Grant (2002) found an increase in both social support and self-esteem when they followed a group of chat-room participants over a period of time.

These findings suggest that the effect of Internet use on self-esteem may depend on its use; using the Internet to relate to others may boost self-esteem by providing access to positive interaction, while using it to escape from social reality may create self-esteem problems by limiting positive interaction or simply reflecting underlying problems.

Grounded in uses and gratifications perspectives, this study examines the relationships among motivations, self-esteem and use of online discussion board by women in Hong Kong.

***RQ2: How does the self-esteem and demographics predict the uses and gratifications of the online discussion boards?***

***RQ3: To what extent can demographics, uses and gratifications, and self-esteem predict the levels of discussion board use by Hong Kong women?***

## **Methodology**

### **Respondents**

An online questionnaire was posted at [www.my3q.com](http://www.my3q.com) for collecting the data during 23 March to 8 April 2004. Qualified respondents were female, and participating in the online message boards.

Messages requested the female users to fill in the online questionnaire. A hyperlink was provided in the request messages, which were posted in 33 online message boards, targeting users in Hong Kong. All questions were compulsory in this version because the respondents should be online message board users. (See Appendix 1)

In addition, emails for requesting to fill in the questionnaires were sent to the researcher's schoolmates, colleagues, and friends. The email recipients were encouraged to spread the questionnaire to their own mailing lists after completion. Questions about the uses and gratifications on using online message board were not compulsory in this email version, because NOT all the respondents would participate in the online message board.

Total final sample size was 384, (with 324 from the online message board posting and 60 from the email distribution). All male respondents, non-online message board users, and incomplete questionnaires eliminated.

About 35% of all female respondents were aged 19 or below, 24% were 20-24, 23% were 25-29, 12% were 30-34, 4% were 35-39, and 2% were 40 or above. The mean monthly personal income was between HK\$8,000 and HK\$10,000, with 44% were students, and 43% were working women. Regarding to the education level, only 1% respondents were primary or below, 10% junior high school (F.1 to F.3), 42% senior high school (F. 4 to F.7) and 47% received college education or above.

## **Measurements**

Questionnaire survey consisted of demographics, frequency of the usage online message boards, uses and gratifications of participation in online discussion boards and self-esteem measurement.

### *Usage of Online Message Board*

Respondents were asked how many days per week they spend on Online Message Board, using a 5-point scale, where “1” = 1 day or below, “2” = 2 to 3 days, “3”= 4 to 5 days, “4”=6 days, and “5”=every day.

Another question was asked how many hours per week do the respondents spend on Online Message Board, using a 6-point scale, where “1”=below 15 minutes, “2”=15 to 30 minutes, “3”=31 to 45 minutes, “4”=46 to 60 minutes, “5”=61 to 90 minutes, and “6”= 91 minutes or above.

### *Uses and Gratifications of Online Message Board*

Respondents were asked their reasons for using online message board. The items were gathered through 5 researcher’s friends who are actively participating in the online message boards. The final questionnaire consisted of 22 gratification statements as primary motives to use the online message boards. A 5-point Likert scale where “1” means “strongly disagree” and “5” means “strongly agree” was used.

### *Self-esteem*

A 10-item the Rosenberg Self-Esteem Scale (SES) was employed in this study (Rosenberg, 1965). It was designed to be a Guttman scale, which means that the SES items were to represent a continuum of self-worth statements ranging from statements, which are endorsed even by individuals with low self-esteem to statements, which are endorsed only by persons with high self-esteem. Rosenberg (1965) scored his 10-question scale that was presented with four response choices, ranging from – “1” being “strongly disagree” to “4” being “strongly agree”. The first

item included questions 1 through 3 and received a positive score if two or three of its questions were answered positively. Questions 4 and 5 and Questions 9 and 10 were aggregated into two other items that were scored positively. Questions 6 through 8 counted individually formed the final three items. For the negatively worded SES questions, responses that expressed disagreement and, hence, were consistent with high self-esteem were considered positive or endorsed. The SES has been widely used, achieving high construct validity, and maintaining a core position among domain-specific self-concept measures (Rosenberg, Schooler, Shoenbach, & Rosenberg, 1995)

SES scale was administered in Chinese. SES Hong Kong translation by Yeung (1998) was used.

## **Results**

### **Gratification of online message board use**

To determine the principal motivations for using the online message board, an exploratory factor analysis procedure was performed with the aim of locating variable groupings of 22 motivation items.

The analysis yielded six factors, five out of six factors with eigenvalues of greater than 1.0 explaining 66 per cent of total variance (see Table 1). The first factor was "general benefit". It consisted of eight items revealing the motivations of using online message board are entertaining, easy to use and access, and express opinions. This factor had an eigenvalues of 7.45 and explained 33.9 per cent of the total variance. The reliability of these eight items as indicated by Cronbach's alpha was high at 0.89 and the mean item scores were high.

**Table 1 Factor loadings of gratifications of online message board use (N=384)**

I use the online discussion board	Mean	SD	Factors					
			1	2	3	4	5	6
<b><u>General Benefit</u></b>								
because it is easy to use	3.86	0.87	0.83	0.06	0.10	0.02	0.03	0.14
because it offers various topics	3.89	0.87	0.81	0.22	0.10	0.00	0.08	0.05
because it is entertaining , like magazine when I have spare time	3.78	0.97	0.76	0.22	0.19	0.03	0.01	0.13
because I use the Internet very often	3.96	0.92	0.75	0.32	0.15	-0.03	-0.04	0.04
because it is easy and convenient to get answers from online message board	3.73	0.88	0.75	0.06	0.11	0.07	0.10	0.18
because it satisfies my needs	3.66	0.88	0.58	0.05	0.31	0.18	0.29	-0.01
because I can express personal opinions	3.36	0.90	0.54	0.01	0.34	0.08	0.16	0.33
because I can express personal opinions	3.95	0.90	0.54	0.52	0.06	0.27	-0.14	0.03
<b><u>Benefits Due To Annomity</u></b>								
to ask secert questions	3.52	1.09	0.30	0.74	0.22	0.07	0.20	-0.05
to ask sensitive questions (e.g. sexual relationship)	3.39	1.11	0.13	0.70	0.26	0.04	0.25	0.08
to complain or express discontent	3.79	0.97	0.39	0.57	0.01	0.40	-0.09	0.18
<b><u>Social Sharing</u></b>								
because I do not have friends/relatives with same interest with me.	2.96	1.18	0.17	0.07	0.72	-0.07	0.05	0.20
to share same interest online	3.77	1.03	0.45	0.25	0.59	0.26	-0.04	-0.01
to share same interest and develop offline relationship	2.90	1.08	0.15	0.37	0.59	0.18	-0.13	0.29
to share the life experience	3.66	1.01	0.33	0.24	0.51	0.28	0.21	-0.07
<b><u>Products / Services Transaction</u></b>								
to promote the services or products	2.45	1.02	-0.10	0.09	0.19	0.75	0.04	0.22
to find the products unavaliabe offline	3.10	1.04	0.10	0.22	0.01	0.73	0.21	0.04
to receive comments on products or services	3.56	0.97	0.32	-0.16	0.04	0.53	0.47	-0.26
<b><u>Information Sharing</u></b>								
to find information that I could not get it offline	2.91	1.01	-0.01	0.27	0.10	-0.01	0.78	0.11
to find comments on organizations	3.08	1.02	0.09	0.00	-0.05	0.26	0.75	0.10
<b><u>Personal identity</u></b>								
because it is trendy	2.48	0.94	0.22	-0.01	0.04	0.05	0.10	0.79
it makes me become leader	2.85	1.02	0.14	0.10	0.23	0.11	0.05	0.79
Eigenvalue			7.45	2.05	1.60	1.4	1.08	0.91
Variance explained (%)			33.94	9.31	7.26	6.37	4.90	4.13
Cronbach's alpha			0.89	0.74	0.73	0.63	0.64	0.65
Response categories are 1 = strongly disagree, 2 = disagree, 3 = neutral or undecided, 4 = agree, and 5 = strongly agree								

The second factor, “benefit due to anonymity”, (eigenvalues = 2.05, 9.3 per cent of variance), composed of three items indicating the online message board can be used as a channel to ask secret or sensitive questions, and to complain or express discontent. Cronbach’s alpha was high at 0.74, and the item mean scores were also high.

“Social sharing” was the third factor (eigenvalues = 1.6, 7.26 per cent variance), contained four items characterizing online message board as a social sharing channel to share same interest and share the life experience. Two of four items mean score were relatively low, but the Cronbach’s alpha remained high at 0.73.

The fourth factor “product or services transaction”, (eigenvalues = 1.4, 6.37 per cent of variance), contained three items reflecting the online message board as a place to promote the products or services, to find the products unavailable offline, and to receive the comments on products or services. (Cronbach’s alpha = 0.63)

“Information sharing” was the fifth factor (eigenvalues = 1.08, 4.9 per cent of variance), consisting of two items indicating online message board use is to find information unavailable offline and to receive comments on organizations. However, the item mean scores and Cronbach’s alpha (0.64) were relatively low.

The last factor, “personal identity” (eigenvalues = 0.91. explained 4.13 per cent of the variance), had two items reflecting the online message board use as trendy and users could become leaders. Both item mean scores and Cronbach’s alpha (0.65) remained low.

Although the item mean scores for some of the factors were low to be considered as a majority view or the principal motives for online message board use, it could be considered as an exploratory exercise to understand the gratification of the use on online message board. Next we will examine how self-esteem and demographics can be significant predictors in satisfying users' needs in use of the online message board.

### **Demographics and self-esteem as predictors of gratification-sought in online message board use**

To test the predictive power of demographics and self-esteem on gratification- sought in online message board use, regressions were used. When treating the gratification-sought as dependent variable, as shown in Table 2, education is a significant predictor of using online message boards for general benefits. This result means less educated respondents who were motivated by the general benefits of using online message board. Results also revealed that high self-esteem respondents and those with low personal income appeared to be attracted by benefits due to anonymity. Less educated respondents tended to use online message board as social sharing channel, while relative mature respondents using it as information sharing and product/services transactions.

**Table 2 Regression analysis of gratifications of online message board using demographic and self-esteem variables as predictors**

	<u>General Benefit</u>	<u>Benefit Due To Anonymity</u>	<u>Social Sharing</u>	<u>Product/ Services Transaction</u>	<u>Information Sharing</u>	<u>Personal identity</u>
Demographics						
Age	0.02	-0.12	-0.12	0.20 **	0.15 **	0.05
Personal Income	-0.02	-0.17 **	-0.06	-0.10	0.03	0.08
Education	-0.18 **	0.12	-0.17 **	-0.07	0.08	-1.63 **
Occupation (student)	0.10	0.12	0.01	-0.06	-0.05	0.04
Self-Esteem	-0.07	0.14 *	0.02	0.07	0.12	-0.08
R Square (%)	0.03	0.04	0.03	0.04	0.02	0.03
**p<.01 *p<.05	N=384					

Finally, less-educated respondent tended to consider participating in online message board for personally identity. The R square for six gratification factors ranged from 2% to 4%.

In sum, only 'benefit due to anonymity' was predicted by self-esteem; general benefit, social sharing and personal identity were linked to less-educated and more mature people were related to product/services transaction and information sharing. Next, we will examine how gratifications of online message board use, self-esteem, and demographics can be significant predictors of frequency in online message board use.

### **Gratifications, demographics and self-esteem as predictors of frequency of online message board use**

To test the predictive power of gratifications, demographics and self-esteem on frequency of online message board use, hierarchical regressions were used. When treating the frequency of online message board use (by days per week and by hours per week) as dependent variable, as shown in Table 3, general benefits, social sharing, education, occupation are the

significant predictors of the frequency use of online message board, while self-esteem approaches significant predictors ( $p < .1$ ) amongst all respondents.

Next, we divided the respondents into two groups: students and non-students. General benefit is still a significant predictor of the frequency use of online message board for both students and non-students. Social sharing and age are significant predictors only amongst the non-students. Self-esteem is significant predictor only amongst students.

The amount of variance explained ranged from 28 to 30 per cent for all respondents, 20 to 21 per cent for student and 30 to 45 per cent for non-students.

**Table 3 Regression of gratifications of online message board use, demographics and self-esteem on frequency of online message board activities**

	All Respondents (N = 384)		Student Respondents (N = 165)		Non-Student Respondents (N = 207)	
	Time spend - Days per week	Time spend - Hours per week	Time spend - Days per week	Time spend - Hours per week	Time spend - Days per week	Time spend - Hours per week
<u>Gratifications of online message board</u>						
General Benefits	0.38 ***	0.41 ***	0.39 ***	0.34 ***	0.32 ***	0.41 ***
Benefits Due To Anonymity	0.08	0.06	0.09	0.03	0.07	0.07
Social Sharing	0.21 ***	0.19 ***	0.02	-0.03	0.31 ***	0.37 ***
Products / Services Transaction	-0.01	-0.12	-0.09	0.04	0.04	-0.03
Information Sharing	-0.06	0.05	0.03	0.12	-0.10	-0.01
Personal identity	0.05	0.06	0.06	0.04	0.04	0.04
<u>Demographics</u>						
Age	0.02	0.06	-0.05	-0.06	0.05	0.15 *
Personal Income	-0.02	0.03	0.15	0.28 ***	0.02	0.03
Education	-0.06	-1.98 ***	0.07	-0.24 **	-0.18 **	-2.03 **
Occupation (student)	0.20 ***	0.05	n.a.	n.a.	n.a.	n.a.
<u>Self-esteem</u>						
Self-esteem	0.08 #	0.04	0.18 *	0.11	-0.14	0.03
<u>R Square (%)</u>						
R Square (%)	0.28	0.30	0.20	0.21	0.30	0.45
***p<.001 **p<.001 *p<.05 #p<.1						

## **Discussion**

In this investigation, it was found a weak relationship amongst self-esteem, the gratifications and frequency of online message board use. The mean score of self-esteem is = 22.0, SD = 4.7, which is consistent with the youth survey conducted by Yeung (1998) in Hong Kong with mean = 22.2, SD = 4.3. When we compared the self-esteem score in Hong Kong with western society, the mean score of Rosenberg Self-Esteem Scale was 33.2 for 5,295 women in the American National Longitudinal Study of Youth (NLSY, 1992). Hong Kong women show a relatively low self-esteem score compared to their American counterparts. It may explain that self-esteem is a relatively less effective attribute as a predictor of usage of online message boards.

In addition, Internet penetration rate is as high as 60% among all households and 45% Internet users are women in Hong Kong. Participating in online message board ranked as number four online activity. Therefore, it appears that online message board has become a common communication channel among Hong Kong women, regardless of their self-esteem level.

There is a significant correlation between self-esteem and benefit due to anonymity amongst non-student respondents. It implies that the non-student respondents who have high self-esteem would like to enjoy the anonymity benefits by using the online message boards. The students may meet their close friend more often than non-students. Students could discuss their secret questions offline with their close friends. In contrast, non-students would like to use anonymity feature of online message boards to ask the secret and sensitive questions.

Self-esteem is a predictor, which approach to significant level, on the frequency use of online message board, ( $p < 0.1$  for all respondent,  $p < 0.05$  for students). It reveals that relatively high self-esteem respondents would spend more days per week on participating in online message board. It is consistent with previous study. It found an increase in both social support and self-esteem when they followed a group of chat-room participants over a period of time (Shaw and Grant, 2002).

The widespread of the Internet population in Hong Kong amongst women could also explain why the general benefits are the significant predictor of the frequency of online message board use. Accessing to the Internet is a daily activity; online message board becomes one of a common communication channels, especially for the female students. Student is a significant predictor for the days spent per week on online message board. Therefore, most users access the online message board to meet their needs for general benefits.

Amongst both students and non-students, the less-educated spent more hours per week on using the online message board. It also implied that less-educated women have spent more time on online message board in Hong Kong. In addition, the less-educated is also a significant predictor of the personal identity gratification. The less-educated respondents tend to agree that, using the online discussion board because it is trendy and it makes them become leader. Accessing to the Internet and online message board is no longer an advanced technology in Hong Kong.

Non-students, who gratify from the social sharing functions, would spend more days and hours per week in participating in the online message

board. It is consistent with the concept of virtual community (Rheingold, 1993). The Internet has provided new opportunities for people to socialize. Social sharing becomes a significant predictor for time spent on using online message board amongst non-students. It may also imply that non-student respondents tend to seek the social support from the online message board. Students are relative easy to receive the social support from peer groups and schoolmates compare to the non-students. People in Hong Kong suffer from long-working hours. The median of working hours was 48 per week. Hong Kong's population has one of the longest workweeks in the world. (Source: The Social and Economic Policy Institute, General Household Survey, Census and Statistics Department 2000). Working groups have less chance to meet their close friends. Therefore, non-students would like to use online message board to receive the social support.

More mature women would like to use online message board to share the information about comments on organization, information could not get offline and products or services transactions. It reflects that more mature women would like to use online message board as a channel for information sharing. It may explain that mature women seek for alternative ways to receive and send out the information apart from traditional mass media.

### **Limitation and Further Research**

There are several limitations in present research. It was not using the probability random sampling method to collect the data. Therefore, we could not generalize these results to current online population in Hong Kong. 43%

of the respondents were students. It is also a limitation to generalize these results to whole women online population.

Self-esteem may be a weak attribute to show the individual difference in the Chinese society. Cultural difference of self-esteem level, (Hetts, Sakuma, & Pelham, 1999), is also a limitation in this study to predict the relationship between self-esteem level and the online message board use.

Uses & Gratification items are close-ended questions in the questionnaires. Respondents may have some other gratifications sought from online message board, however, it could not be revealed in the present survey.

Further studies could be focused on the usage of online message board in special population, e.g. disables, lesbians and guys, support groups for long-term illness and single parent. It could help us to understand the unique uses and gratifications of using online message boards amongst special groups of people. In addition, more research is needed to clarify specific aspects of Internet usage and how these may influence both social support and aspects of our self-concept.

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