Students Communication Preferences and Self-Esteem

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Abstract. *The goal of this study was to discover what is the preferred communication medium for students in case of personal topics: online communication tools (facebook, skype or e-mail) or face to face (at coffee shops, students' canteen or faculty building). Further the goal of this research was to see whether there is difference in preferred communication medium of students with their friends between high self-esteem students and low self-esteem students; further to see whether there is difference in online and offline impression management between high self-esteem students and low self-esteem students. Last goal of this research was to see whether there is difference in using the emoticons in online communication between high self-esteem students and low self-esteem students.*

Keywords. Self-esteem, communication medium, online/offline image management, emoticons

1 Introduction

Communication and people interrelationship were always interesting area of study for different groups, researchers, professors, students and others. The need for social interactions is one of the basic human needs. With technology advancements, area of research has broaden. Traditionally this need was fulfilled with face-to-face interactions, but due the technology advancements now we can use new methods for interacting with others. When we talk about communication between people, we don't think only about face to face interpersonal communication anymore. Instead we talk about internet communication too such as "*voice-over-internet-protocol*", *instant messaging* etc. much more often these days. For Computer-mediated communication (CMC) already has been showed to be more intimate, personal, and self-disclosing way of communication than face-to-face (FtF) interaction [1]. Research have found that electronic forms of communication have possibility to help individuals, with symptoms of *social anxiety*, *loneliness*, or lac*k of face-to-face social skills,* in satisfying their social interaction needs [2], [3], [4].

2 Literature review

The starting motivation for this study was this research done by author Gonzales [5]. In this study Amy L. Gonzales researched how much quality of communication influences person's self-esteem, does textual communication have more influence on self-esteem than face-to-face communication. And many similar studies were done in the past. Common conclusion is that relationships that have better and more quality communication are associated with better health, less stress and better immune system functioning of people [6]. Whereas, socially isolated people are at greater risk of being ill and die younger than socially connected people. So, it's good to have good relationship with others not just for sake of relationships with others and for other people's support, but for more quality of physical and psychic health of us.

An interesting study was also done by Mesch and Talmud [7]. Their target group were Israel adolescents, whose average age was 15.49 years. They've tested following hypotheses: (1) *Adolescents that report being close to their face-to-face friends are less likely to make friends online.* (2) *Adolescents that report high self-esteem are less likely to make friends online.* (3) *Adolescents that reports being distant from their parents are more likely to make friends online.* (4) *Social ties that were created online are likely to be weaker than social ties that were created face-to-face.*

63.3% of their respondents said that they have first met their friends in the neighborhood, 24% of them at school, and 12.6% online. As to *family environment*, adolescents reporting having online friends were not different from those not having online friends in terms of closeness to their parents; but they reported a higher level of conflict with their parents and less closeness to their face-to-face friends. In frequency and types of Internet use, adolescents reporting having online friends used the Internet more during the day and more for social purposes that adolescents reporting not having friends who were met online. Survey provided some interesting correlations. Conflicts between adolescents and parents are more likely to be reported in less educated families. Adolescents that report conflict with their parents are less attached to face to face friends and report knowing their friends less. Online friendship is positively associated with family conflicts, and lower attachment to friends. As offline friendship formation requires investment of time, online friendship formation is in a positive correlation with the extent of Internet use for social purposes.

The Hyperpersonal Model [8] claims that interpersonal processes may lead to enhanced or hyperpersonal impression formation in text because users are able to carefully construct messages, and attributions caused by those messages may be exaggerated in the absence of additional real-time visual and audio cues [8]. Indeed, studies have demonstrated that online content has a more substantial effect on interpersonal impressions, and may also influence impressions of the self. From this perspective then, the enactment of supportive listening and mutual sharing that has been shown to improve self-esteem offline may be perceived as even more supportive and intimate when it takes place in text, which could have an enhanced effect on self-esteem [9]. They have researched how much quality of communication influences person's self-esteem and tested following hypotheses: (1) *Most communication will take place face-to-face.* (2) *People will disclose more in text-based communication than in face-to-face or cellphone communication.* (3) *People will find face-to-face and cell phone communication more meaningful than text-based communication.* (4) *The relationship between meaningful communication and self-esteem will be stronger in text-based communication than in face-to-face or cellphone communication.* In this study, 98 people between the ages of 18–38 years participated for an award of $90. Every participant was given Palm Pilot smartphone with installed alarm, and they were asked to complete short survey about last two interactions several times a day, for 6 days. Results showed that most of conversations took place face-to-face (62%); telephone communication (SMS text, cell

phone voice, landline voice) constituted 26% of social interactions, with 98% of those exchanges utilizing a cell phone; Internet communication constituted about 12% of social interactions. Face-to-face communication was the dominant mode of communication, which supports first hypothesis. The second hypothesis was partially supported. Participants reported disclosing less in face-to-face communication than they did in text-based communication or cellphone voice communication. As a matter of third hypothesis, there was no statistical difference in the quality of text-based communication and face-to-face communication. However, cellphone communication was more meaningful than text-based communication. These findings demonstrate mixed support for third hypothesis. Findings reveal that people who had more meaningful communication during the week across all communication channels had better self-esteem at the end of the week. Also, meaningful face-to-face interactions during the week had a marginally significant effect on self-esteem, cellphone interactions during the week did not have an effect on self-esteem and text-based interactions had a positive effect on self-esteem.

Hollenbaugh and Ferris in their study [10] examined individual and sociological factors and Facebook motives to discover the impact on depth, breadth, and amount of user self-disclosure. They have found out that people who felt less connected to their social groups were more oriented to Facebook to feel less lonely by connecting to others, as well as to get attention. Further, they found out that people with lower self-esteem were more likely to disclose about a variety of topics on Facebook and with the Facebook activities they somehow fill a void in their lives. Similar findings have been found in the work of Nyagah et al. [11]. Students with lower self-esteem may gain more social capital through Facebook as compared to individuals with higher self-esteem [12]. Tazghini and Siedlecki [12] revealed that more individuals with high self-esteem liked more to share pictures, thoughts, and ideas on Facebook as compared to individuals with lower self-esteem. They suggest that this is because students with lower self-esteem are not as comfortable posting information about themselves in such a public forum [12].

From the results of studies presented above, it can be conclude that in general people who have less self-esteem will more frequently communicate online than face to face. That was motivation for this research. The authors wanted to research whether there is difference in preference of communication medium based on students' self-esteem attitude.

3 Research Questions

This research was outcome of student's project at course Computer-mediated communication in winter semester 2014/2015. More specifically with this research authors want to answer on the following research questions:

(1) What is the preferred communication medium for students in case of personal topics?

(2) Is there difference in self-esteem between male and female students?

(3) Is there difference in preferred communication medium with friends between high self-esteem students and low self-esteem students?

(4) Is there difference in online and offline impression management between high self-esteem students and low self-esteem students?

(5) Is there difference in using the emoticons in online communication between high self-esteem students and low self-esteem students?

The survey was organized in three sections. First part was demographic questions (gender, age). Second part was related to the medium of communication and the frequency and depth of communication with friends. And last part of the survey was one question related to the self-esteem. All questions was rated on scale of 1 to 5 (*1 meaning strongly disagree, and 5 meaning strongly agree*). Participants of this study were students between the ages 18-28. Participants were acquaintance of the first author and they were asked over Facebook and/or e-mail to participate in the survey. The main question about self-esteem was formulated as last questionnaire single item as attitude about self-esteem level students believe they possess: "*I think I have enough level of self-esteem.*". Students who answered on this statement with "*agree*" or "*strongly agree*" were categorized, by authors' opinion, as students with high self-esteem level, and ones that answered with "*strongly disagree*", "*disagree*" or "*neutral*" were categorized as students with low self-esteem level. Categories were formed in that way because authors considered that students which answered as *neutral* (*not sure*) about the self-esteem level they have, would better fit in category with students with low self-esteem level. However, we are aware that using the self-esteem tested scales would have much more significance, but would increase questionnaire length and maybe even turn away students to participate in the study. As this was small scale research and outcome of course project, we believe that these findings are still valuable, and revel some interesting insights about students and their online/offline communication preferences.

4 Research Findings

Survey was completed by 59 students, which were 25 males and 34 females. Based on the results in table 1 we can see that in case of *intensity (volume and amount of information)* and *medium communication* students with their friends prefer to talk more in *coffee shops* than via online communication tool and if the topic is *personal* they like to deliver message *face to face* than via online communication tool.

Table 1. Questions about topic and medium of communication

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std.dev.
With my friends I intensively communicate via facebook (volume and amount of information).	5 (8,47%)	13 (22,03%)	17 (28,81%)	16 (27,12%)	8 (13,56%)	**2,85**	**1,172**
With my friends I intensively communicate via skype (volume and amount of information).	2 (3,39%)	4 (6,78%)	15 (25,42%)	17 (28,81%)	21 (35,59%)	**2,14**	**1,090**
With my friends I intensively communicate via email (volume and amount of information).	0 (0%)	1 (1,70%)	2 (3,39%)	10 (16,95%)	46 (77,97%)	**1,29**	**,617**
With my friends I intensively communicate in coffee shop (volume and amount of information).	23 (38,98%)	20 (33,90%)	9 (15,25%)	2 (3,39%)	5 (8,47%)	**3,92**	**1,208**

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std.dev.
With my friends I intensively communicate in students' canteen (volume and amount of information).	8 (13,56%)	16 (27,12%)	17 (28,81%)	8 (13,56%)	10 (16,95%)	**3,07**	**1,285**
With my friends I intensively communicate on faculty (volume and amount of information).	9 (15,25%)	18 (30,51%)	16 (27,12%)	13 (22,03%)	3 (5,08%)	**3,29**	**1,130**
I talk about personal things with friends via skype.	0 (0%)	2 (3,39%)	8 (13,56%)	19 (32,20%)	30 (50,85%)	**4,66**	**,710**
I talk about personal things with friends over email.	0 (0%)	0 (0%)	2 (3,39%)	10 (16,95%)	47 (79,66%)	**1,69**	**,836**
I talk about personal things with friends via facebook	2 (3,39%)	6 (10,17%)	18 (30,51%)	16 (27,12%)	17 (28,81%)	**1,24**	**,503**
I talk about personal things with friends face to face.	45 (76,27%)	10 (16,95%)	2 (3,39%)	2 (3,39%)	0 (0%)	**2,32**	**1,105**

Analyzing data using an *independed t-sample test* to see whether there is difference between male and female students in case of self-esteem attitude (table 2), the results showed that there is *no statistically significant difference (male students: M=3,72; SD=1,137; female students: M=3,24; SD=1,130; t(57)=1,624; p=0,110).*

To get answers on the 3rd and 4th, 5th research question author split data in two groups (table 2). Students how answered on the statement "*I think I have enough level of self-esteem.*" with *Neutral*, *Disagree* and *Strongly Disagree* were categorized as *low level self-esteem group*, while students who answered on mention statement with *Agree* and *Strongly Agree* were classified as *high level self-esteem group*.

Table 2. Question about self-esteem level by gender

Statements	5 (Strongly Agree)	4 (Agree)	3 (Neutral)	2 (Disagree)	1 (Strongly Disagree)	Mean	Std. Dev.
I think I have enough level of self-esteem.	12 (20,34%)	18 (30,51%)	16 (27,12%)	10 (16,95%)	3 (5,08%)	**3,44**	**1,149**
Gender (total)	M(8); Ž(4)	M(6); Ž(12)	M(8); Ž(8)	M(2); Ž(8)	M(1); Ž(2)		

To find out whether there is difference between students with *high self-esteem attitude* students and students with *low self-esteem attitude* in case of *intensity* (*volume and amount of information*) *communication via mediums Facebook, Skype or email* an independent t-sample test analysis was used. The results showed that there is *no statistically significant difference between the intensity* (*volume and amount of information*) *communication via medium Facebook (low group: M=2,76; SD=1,06; high group: M=2,93; SD=1,29; t(57)=-0,57; p=0,571) and email (low group: M=1,24; SD=0,51; high group: M=1,33; SD=0,71; t(57)=-0,569; p=0,572), b*ut the results showed that there *is difference in case of Skype as communication medium (low group: M=1,83; SD=0,85; high group: M=2,43; SD=1,22; t(52)=-2,217; p=0,031)*, and from mean values we can see that

students with *low self-esteem much less use Skype for communication with friends, than students with high self-esteem.*

To find out whether there is difference between *high self-esteem students* and *low self-esteem* students in case of *the intensity* (*volume and amount of information*) *communication in offline places: coffee-shops, students' canteen and at faculty building.* An independed t-sample test analysis showed that there is *no statistically significant difference* between *the intensity* (*volume and amount of information*) *communication* in offline places: *coffee-shops (low group: M=3,76; SD=1,154; high group: M=4,07; SD=1,258; t(57)=-,979; p=,332), students' canteen (low group: M=3,07; SD=1,193; high group: M=3,07; SD=1,388; t(57)= ,007; p=,995)* and at *faculty*

building (low group: M=3,17; SD=1,167; high group: M=3,40; SD=1,102; t(57)= -,770; p=,444). In fact based on the mean values we can see that this type of communication is much preferred way of communication in contrast to the online communication for both groups i.e. offline communication has higher mean values, and communication in coffee shops is much preferred place to communicate.

To find out whether there is difference in mean values between *high self-esteem students* and *low self-esteem* students in case of *offline image management (statement:"I take care about my offline image e.g. my outfit, with whom I hang out, what events will I attend, what and in what way will I say something etc.")* and online image management (statement: "I take care about my online image e.g. which picture will I set as profile picture, how much will I post and which posts will I post on my wall etc.").* An independed t-sample test analysis showed that there *is statistically significant difference* in mean values between *high self-esteem students* and *low self-esteem students* in case of *online image management (low group: M=2,86; SD=1,274; high group: M=3,50; SD=1,106; t(57)=-2,056; p=,044)* and *offline image management (low group: M=3,14; SD=1,217; high group: M=4,23; SD=,774; t(47)= -4,111; p=,000)*. Students with *low self-esteem* stated the *take care less of both of their offline and online image*, in comparison with students with high self-esteem.

To find out whether there is difference in mean values between *high self-esteem students* and l*ow self-esteem students* in case of using the *emoticons* in online communication (statement: *"In online communication I frequently use emoticons to emphasize my feelings."*). An independed t-sample test analysis showed that there *is no statistically significant difference* between *high self-esteem students* and *low self-esteem students* in case of using the emoticons in online communication *(low group: M=3,97; SD=1,052; high group: M=4,07; SD=1,081; t(57)= -,364; p=,717)*.

5 Conclusion

When individuals' use computer mediated communication, they can choose asynchronous over synchronous way interaction in order to have more control over the communication process, as well to more thoughtfully manage their online identity. With this research we wanted to see whether there is difference in preferred communication medium between high self-esteem students and low self-esteem students in case of the communication medium with

their friends. Further, we wanted to see whether there is difference in online and offline impression management between high self-esteem students and low self-esteem students.

The results of this study showed that students prefer to talk more with their friends face to face than via online communication tool. This make sense because we choose someone to be our friend because he or she make us feel comfortable. From the CMC tools Facebook was used most, following by Skype and on the last place was e-mail communication. Both groups (low self-esteem group and high self-esteem group) didn't differ in online communication emoticon use. But only significant difference was that both groups (low self-esteem group and high self-esteem group) differ in case of online and offline image management. Students with high self-esteem attitude take much more care about their online and offline image than students with low level self-esteem attitudes. Our results confirmed some known facts, but also showed current students' preferences in terms of offline/online communication mediums. In any case this study is strong motivation for us to repeat the analysis with tested scales and to further analyze the difference between online/offline communications patterns between high self-esteem students and low self-esteem students, and to monitor the change in self-esteem before and after having online communication or before and after they offline communication with their friends.

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