K_089

Analysis of Communication Prompted by Black "●" Communication System - Effects of Emotional Emphasis in Comparison with E-mails and Messengers.

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1. Introduction

Communication styles have changed a great deal in recent years, following the popularization of the Internet and digital technologies. Mobile phones, video phones, e-mail, PDAs and Instant messaging systems have become the latest method for communication, and, at the same time, have also become the latest form of entertainment for modern people. Although these new communication methods have enhanced our lifestyles, many people still find it difficult to directly express or share their true feelings with other people.

In computer-mediated communications, people tend to focus on the meaning of the text rather than other information. Text-based communications, however, sometimes cause misunderstandings and disagreements, since written words cannot always express some of the emotional nuances that we use in face-to-face or other communications. Additionally, it is often difficult to express some of the more ambiguous human feelings or nuances via computer-mediated communications. As a result, this type of communication has been used in more task-oriented applications than in other usages [2].

In this paper, the experiments on the usages between the communication system using black prompter, e-mail and instant messaging system have been conducted and studied. From the experimental results, it was discovered that conversations conducted using the prompter system expressed and transmitted multi emotional nuances than the other two tools. It was also discovered that prompter-based conversations are able to soften the potentially direct and sharp meanings of what was written, but at the same time are able to emphasize emotions that the writer wishes to express.

2. The "●" Prompter Conversation System

The prompter communication system was designed to promote communication using the black "●" prompter. The system was created using a combination of both images and characters, and through a process of interpreting the resultant images, those involved in the experiment not only receive and accept the conversation, but also participate in the conversation. The biggest advantage of this system is the reduction of constraints during the conversation.

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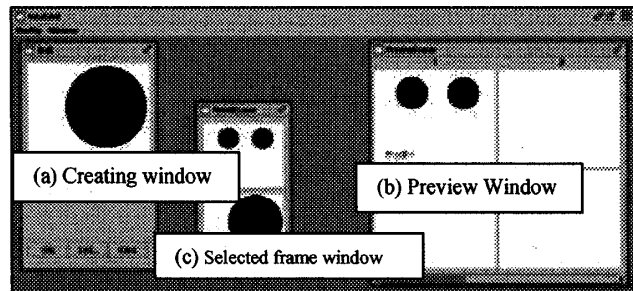An outline of the prompter communication system is shown in Fig. 1 below.

(a) Creating window
(b) Preview Window
(c) Selected frame window

Fig. 1 Prompter Communication system

3. Experimental Method

The experiments were conducted with ten (10) participators, nine males and one female undergraduate students, divided into two groups, named A and B. The participators in group A were asked to create messages according to a particular emotional situation given by instructor, and express their feelings toward to that particular emotional situation by the given communication tool. The emotional situations given by instructor were divided into three categories, happiness, sadness and anger. The tools provided to create messages were prompter communication system, instant messaging system and e-mail. There were nine (9) tasks for each participator to complete, three tasks for each same emotion but in different situations, which were also equally created by different communication tools. Each task was limited to be completed within ten (10) minutes, although participators were allowed to leave when task completed.

The participators in group B were asked to complete the questionnaires regarding their feelings toward the messages completed by group A, meaning that forty-five (45) questionnaires were answered by each participator. Each questionnaire contained three emotional categories, rated from 0 to 10, with 0 as the weakest and 10 as the strongest. Participators were asked to fill all three emotional categories regarding their feelings toward to that particular message. The example of the questionnaire is shown in the Table 1 below.

Table 1 Example of Questionnaire

Q1	Emotion	Emotional Levels										
	Angry	0	1	2	3	4	5	6	7	8	9	10
	Sad	0	1	2	3	4	5	6	7	8	9	10
	Happy	0	1	2	3	4	5	6	7	8	9	10

4. Experimental results and discussion

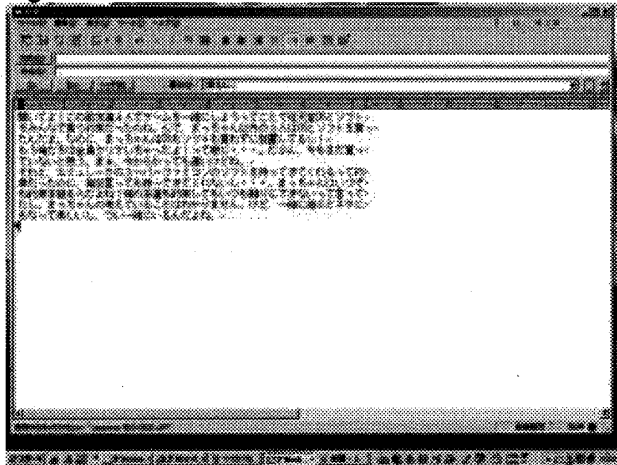The examples of the experiment al results are shown in Fig. 2 to 4 below.

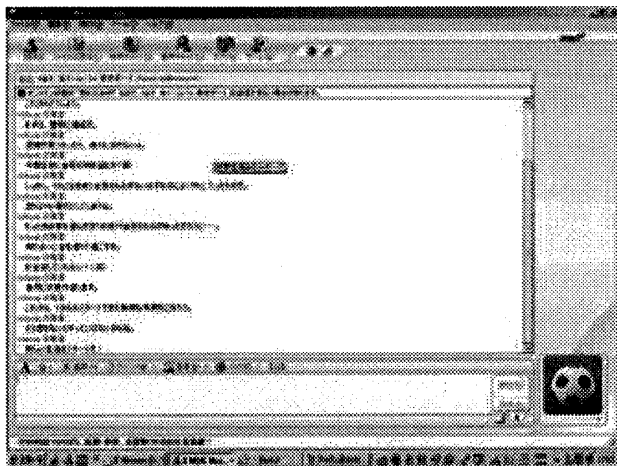Fig. 2 Experimental results of e-mail message

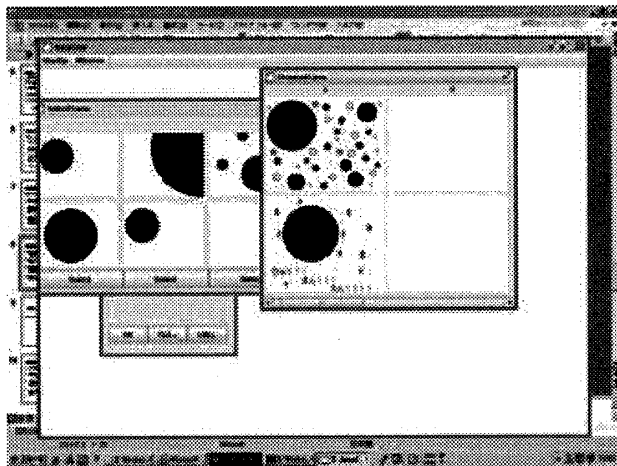Fig. 3 Experimental results of messenger message

Fig. 4 Experimental results of Prompter system message

The experimental results below on Table 2 show that all three tools had generally similar results on the emotional situation of "Happiness" and "Sadness", although in the situation of "Sadness", the emotional grades of "Anger" was slightly higher toward the messages created by "E-mail" and "Prompter system" than "Instant Messenger".

Table 2 Questionnaire Results relating to each emotion situation regarding to communication tools

Emotional Situation/Tools	Angry	Sadness	Happiness
Happiness			
Messenger	0	0.12	8.8
E-mail	0	0.28	8.8
Prompter System	0.12	1.84	7
Sadness			
Messenger	0.68	8.56	0.08
E-mail	2.12	7.76	0.72
Prompter System	2.28	7.84	0.32
Anger			
Messenger	7.92	4.56	0.16
E-mail	6.92	4.76	0.56
Prompter System	4.16	4.92	2.52

In the emotional situation of "Anger", "Prompter System" had relatively low grades than the other two tools, and showed slightly higher grades on the emotion of happiness. This can be explained by the fact that the communication system using a prompter included two slices of messages at once, therefore some participators, in Group A, created those two slices in a series of stories to explain the emotional situation which confused some of the participators in Group B when evaluated those messages.

Also, from the results, it shown that the emotion grades of "Sadness" was relatively high in the emotional situation of "Anger", in comparison of the emotional degrees of "Angry" in the emotional situation of "Sadness". This can be explained by the fact that the anger situations provided by instructor were understood or interpreted by participators from emotion of sadness and diverted into emotion of anger.

During these experiments was first time that the prompter system had been used by almost all participants, where the other two tools had been used randomly over long period. Therefore this also can be taken as one of the factors effects the overall results. Although in comparison with those two well known and commonly using communication tools, a great many improvements are still needed, but the system has shown great potential and strength not only in the system itself, but also the concepts of the prompter system, as a new style and approach to interactive communication.

References

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