ABSTRACT

The effect of gender information on trust building in virtual settings is an important yet unexplored area in HCI. In this study we empirically investigate gender differences in trust perception in two media, video and Instant Messaging (IM), while performing negotiation and brainstorming tasks. Participants who did not previously know each other were recruited to form three possible pairings: male/male, male/female and female/female. Each pair carried out a task via computer-mediated communication using either video or IM. Our primary results uncover a significant gender difference in trust perception, with both female/female and male/female pairs perceiving higher levels of trust than male pairs when gender information about the partner is seen via the video channel. The results also show that all gender pairs perceive higher levels of trust in the brainstorming task than in the negotiation task. Another interesting finding is that male/female pairs have better performance outcomes than the other two pairings.

HYPOTHESES

Gender Differences in Trust Perception Using Different Media

- **H1a**: Female pairs will perceive higher levels of trust than male pairs in the video condition; male/female pairs will be in the middle between female pairs and male pairs.
- **H1b**: Female pairs will perceive higher levels of trust than male pairs when gender information is provided via the IM channel (IM_Known condition); male/female pairs will be in the middle between female pairs and male pairs.
- **H1c**: All the pairs, female, male and male/female, will perceive similar levels of trust in the IM condition.

Gender Differences in Trust Perception in Different Tasks

- **H2a**: All pairs, female, male and male/female, will perceive a higher level of trust in doing the brainstorming task than the negotiation task.
- **H2b & H2c**: Pair Performance Time in the Two Tasks

- **H2b**: Female pairs will take less time than male pairs in doing the negotiation task; male pairs will take less time than female pairs in doing the brainstorming task.
- **H2c**: Male/female pairs will take more time than both male and female pairs in both the brainstorming task and the negotiation task.

IMPLICATIONS AND FUTURE WORK

- In video-mediated virtual environments, knowing gender information may enable females to achieve higher levels of trust and thus improve their work performance.
- Having both males and females in virtual teams may reach better performance outcome.
- Future research is needed on male vs. female roles in group activities.
- Culture and gender interaction issues should be considered in further studies.