

:

()*

1.

,

(, 1992; Wilson, Aleman, & Leatham, 1998).

,

(, 1994).

,

,

.

(Klein, Moon, & Picard, 2002; Nijholt, 2004).

.

.

(Nass, Steuer, & Tauber, 1994)

(Mayer, Johnson, Shaw, & Sandhu, 2005; Prendinger, Mori, & Ishizuka, 2005; Wang, Johnson, Rizzo, Shaw, & Mayer, 2005)

,

,

,

,

.

,

.

(Whitworth, 2005).

(Prendinger, et al., 2005; Wang, et al., 2005).

.

(Baxter, 1984; Brown & Levinson, 1987; Craig, Tracy, & Spisak, 1986; Wilson, et al., 1998; Wilson, Kim, & Meischke, 1991/1992) ,

.

* hci.comm@gmail.com

(Holtgraves & Yang, 1992; Lim & Bowers, 1991)
(Goldsmith, 1994; Wilson, et al., 1991)

2.

1)

(1)

Social Actors, CASA)
(1996, pp. 5)

“ ”

(social actor)

‘ ’ (Computers Are
(Reeves & Nass, 1996).

(tool)

(Reeves & Nass, 1996;
Nass & Moon, 2000).
CASA

(Bracken & Lombard, 2004; Brave, Nass, & Hutchinson, 2005;
Fogg & Nass, 1997; Isbister & Nass, 2000; Johnson & Gardner, 2007; Lee, 2003;
Nass, Moon, Fogg, Reeves, & Dryer, 1995; Nass, et al., 1994).

(Nass, et al., 1995; Isbister & Nass, 2000).

(Lee, 2003).
(Brave, et al., 2005) (Bracken & Lombard, 2004)

(Fogg & Nass, 1997).
(norm of reciprocity)' (Nass, et al., 1994).

(2)
,

(Nass, et al., 1994).

(Reeves & Nass, 1996). (Nass et al., 1994)
.
,
.

3 ()
()

(Nass & Moon, 2000)
(overlearned)'
.

CASA
,

(3)
(Nass., et al., 1994)
CASA
,

(: “ ?”) (: “ ”)

)

(Mayer, et al., 2005).

,
(Wang, et al., 2005).

(Prendinger, Mori, & Ishizuka, 2005).

(Wilkie, Jack, & Littlewood,
2005)

(4)

(Mayer, et al., 2005; Wang, et al., 2005)

,
(Wilkie, et al., 2005)

, È Niig, r., 05)

(2)

(Brown & Levinson, 1987; Lim & Bowers, 1991; Wilson, et al., 1998).

(facework)

(Brown & Levinson, 1987)

(superstrategy)

(1)

(no request strategy), (2)

(off- record strategy), (3)

(negative politeness strategy), (4)

(positive politeness strategy). (5)

(on- record strategy)

(Brown & Levinson, 1987; Lim & Bowers, 1987).

(Baxter, 1984; Brown &

Levinson, 1987; Lim & Bowers, 1991).

(3)

(Baxter, 1984; Holtgraves & Yang, 1992; Leichthy & Applegate, 1991; Lim & Bowers, 1991; Roloff, et al., 1988; Wilson, et al., 1998),

(supportive communication)

(negative face)

positive, negative politeness

, positive, negative face

(Goldsmith, 1994; Wilson, et al., 1998).

(Dakof & Taylor, 1990; Goldsmith, 1994; Sarason, Pierce, & Sarason, 1990).

(Caplan & Samter, 1999; Goldsmith, 1994, 1999). (Brown & Levinson, 1987)

(quality) (Caplan & Samter, 1999; Goldsmith, 1994; MacGeorge, et al., 2002). (Goldsmith, 1994; MacGeorge, et al., 2002).

(Brown & Levinson, 1987).

(Goldsmith, 1994).

(4)

(Brown & Levinson, 1987)

(Caplan & Samter, 1999; Goldsmith, 1994).

(Baxter, 1984; Brown & Levinson, 1987).

(Wilson, et al., 1998).

(Caplan & Samter, 1999)

3)

(1)

(Brown & Levinson, 1987)

(social distance),

(power),

(rank of imposition)

(Baxter, 1984; Holtgraves & Yang, 1992; Lim & Bowers, 1991).

(Brown & Levinson, 1987)

(Clark, Mills, & Powell, 1986),

(Holtgraves & Yang, 1992; Leichty & Applegate, 1991).

(Baxter, 1984; Leichty & Applegate, 1991; Lim & Bowers, 1991). (Leichty & Applegate, 1991)

(Leichty & Applegate, 1991; Lim & Bowers, 1991).

(2)

(Goldsmith & MacGeorge, 2000)

(Leichty & Applegate, 1991; Lim & Bowers, 1991)

3

(MacGeorge, et al., 2002)

(Caplan & Samter, 1999)

(Brown & Levinson, 1987; Lim & Bowers, 1991)

3.

H1a(b): () ,
()

H2a(b): () ,
()

H3a(b): ()
()

H4a(b):

()

RQ1:

?

4.

1)

160

2(: /

) × 2(: /) × 2(

: /) 2× 2× 2 8

20

2)

4~6

10

1

CASA

HCI

12

1 12

45

3)

(1)

(Derlega, Metts, Petronio, & Margulis, 1993)

(Aron, Melinat, Aron, Vallone, & Bator, 1997; Sedikides, Campbell, Reeder, & Elliot, 1998).

HCI

(, 2006, 2007; Moon, 2000, 2003).

" 1

"

2).

(Sedikides, et al., 1998)

2)

1

"

(Moon, 2003)

(2)

(Brown & Levinson, 1987)

(Baxter, 1984; Lim, & Bowers, 1991; Goldsmith, 1994; Caplan & Samter, 1999; Goldsmith & MacGeorge, 2000)

(self- image)

“OOO

.”, “OOO

“OOO

~

.”, “OOO

.”

OOO

”, ”

?”, ”

“~

.”, “~

.” ~

.”, “~

.”

4)

(1)

:

(: ‘ ’,

: ‘ ’)

(Inclusion of Other in the Self) (Aron, Aron, & Smollan, 1991)

(Subjective Closeness Index; Berscheid, Snyder, & Omoto, 1989)

., "

."

(2)

(Wilson, et al., 1998; Caplan & Samter, 1999; Goldsmith & MacGeorge, 2000)

),

4

(3)

(Goldsmith, McDermott, & Alexander, 2000)

3

12

7

3

2

(

=.932,

=.864).

5.

1)

:

'(M=3.50, SD=1.39)

' (M=1.47, SD=.75)

(F(1, 152)=132.405, p<.001).

'(M=4.18, SD=.79)

'(M=1.71, SD=.60)

(F(1, 152)=489.833, p<.001).

SD=1.16) (M=5.36,
(M=2.33, SD=.94)
(F(1,

152)=365.073, $p<.001$).
(M=3.91, SD=1.26)
(M=3.23, SD=1.40)
(F(1, 152)=15.036, $p<.001$).

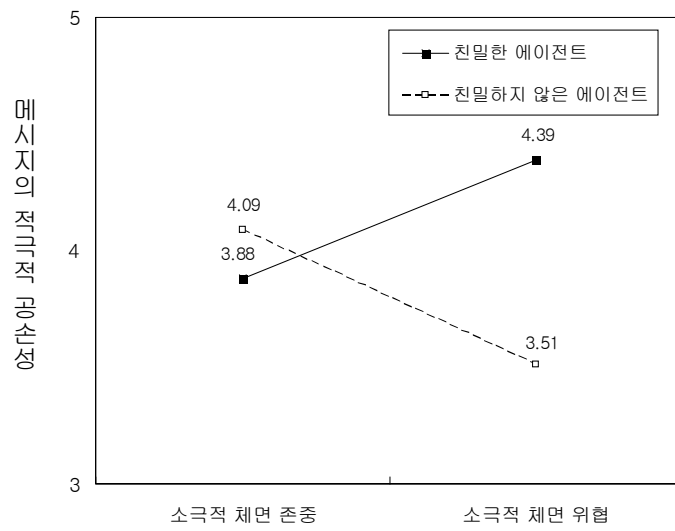
2)

(M=4.86, SD=1.06) (M=3.08, SD=.94)
(F(1, 152)=140.062, $p<.001$, $\eta^2=.480$).
(M=5.15,
SD=.99) (M=4.00, SD=1.08)
(F(1, 152)=53.101, $p<.001$, $\eta^2=.259$).

(M=4.75, SD=1.03)
(M=4.40, SD=1.29)
(F(1, 152)=5.034, $p<.05$, $\eta^2=.032$).
H1a
H1b

(F(1, 152)=13.052, $p<.001$, $\eta^2=.079$;
F(1, 152)=8.062, $p<.01$, $\eta^2=.050$).
(M=3.88, SD=1.17)
(M=4.39, SD=1.30)

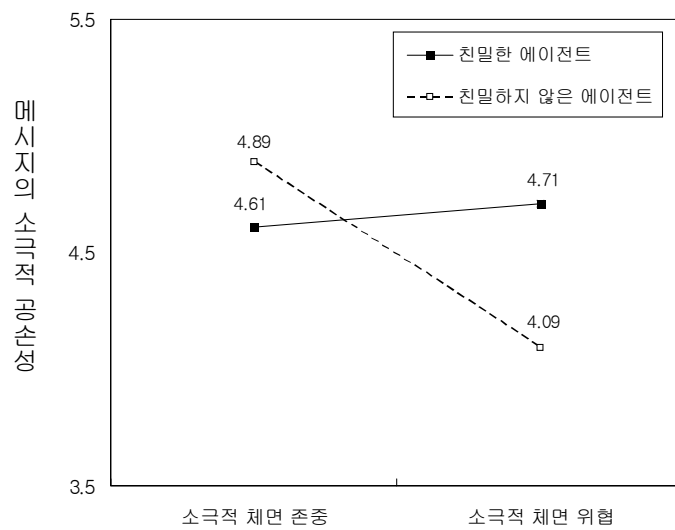
(M=3.51, SD=1.45) (M=4.09,
SD=1.32) (< 1>).



< 1>

,
(M=4.71, SD=1.12)
(M=4.61, SD=1.04)
(M=4.89, SD=1.02)
(M=4.09, SD=1.39)
()
()
(< 2>
H3a

H3b



< 2>

3)

(M=5.65, SD=1.03)

(M=5.01, SD=1.12)

(F(1, 152)=14.487, $p<.001$, $\eta^2=.087$).

(M=4.92, SD=.96)

(M=3.37, SD=.87)

(F(1, 152)=151.711, $p<.001$, $\eta^2=.500$).

(M=4.28, SD=1.08)

(M=4.01, SD=1.30)

(F(1,

152)=4.657, $p<.05$, $\eta^2=.030$).

H2a

H2b

(F(1, 152)=5.661, $p<.001$, $\eta^2=.036$).

(M=3.69, SD=.76)

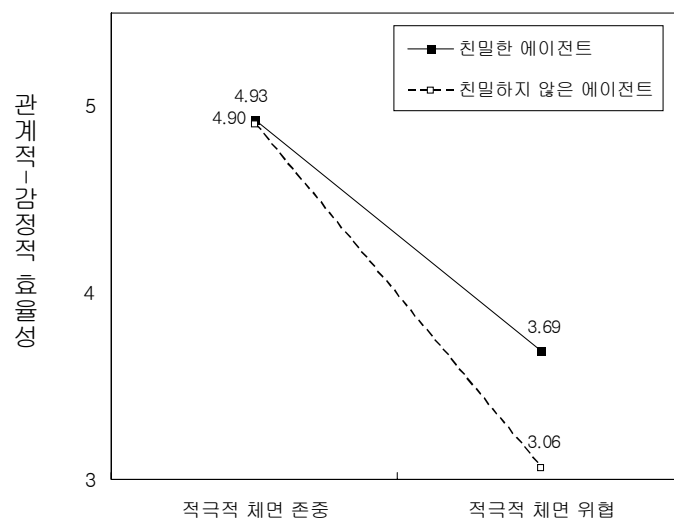
(M=3.06, SD=.87)

(M=4.93, SD=.89)

(M=4.90, SD=1.03)

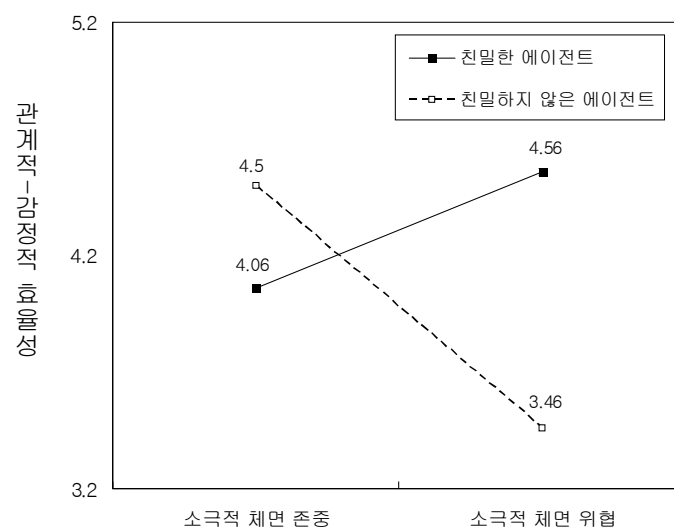
(< 3>).

H4a



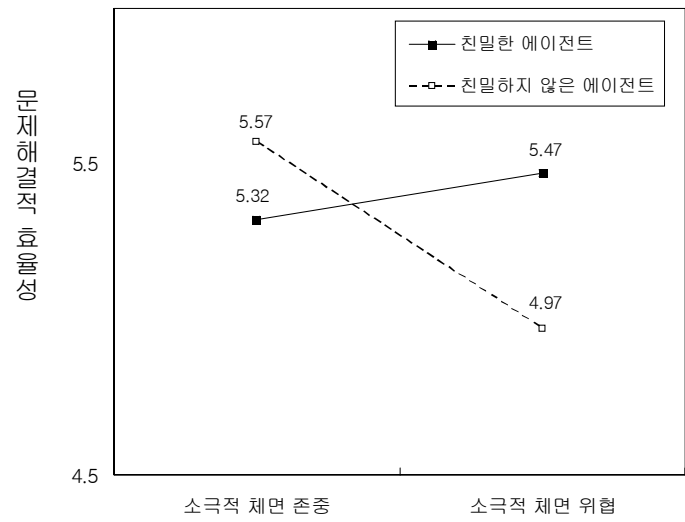
< 3>

($F(1, 152)=4.948, p<.05, \eta^2=.032$; $F(1, 152)=37.996, p<.001, \eta^2=.200$).
(M=4.56, SD=1.11)
(M=4.06, SD=.91)
(M=4.50, SD=1.21)
(M=3.46, SD=1.24) (< 4>).



< 4> -

(M=5.47, SD=.92)
(M=5.32, SD=1.01)
(M=5.57, SD=1.02)
(M=4.97, SD=1.41)
(< 5>).
H4b .



< 5>

,

RQ1

,

.

6.

1)

/

. ,

.

.

,

.

,

-

.

.

,

,

,

-

.

,

.

Goldsmith, 1994) (Caplan & Samter, 1999; /

al., 2005) (Wilkie, et

(Wilson, et al., 1998)

CASA

(Brown & Levinson, 1987; Leichthy & Applegate, 1991)

CASA
& Nass, 2000),

(Nass, et al., 1995; Isbister
(Bracken & Lombard, 2004),
(Mayer, et al., 2005; Wang, et al., 2005)

2)

(Wilkie, et al., 2005)

(Wilson, et al., 1998).

(1992). , 27 , 5- 29.
(1994). 32 ,
11- 35.
(2006). HCI , 1 2 , 35- 42.
(2007). ,
51 2 .
(1994). , 32
, 207- 247.

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596- 612.

Aron, A., Melinat, E., Aron, E. N., Vallone, R. D., & Bator, R. J. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin*, 23, 363- 377.

Baxter, L. (1984). An investigation of compliance- gaining as politeness. *Human Communication Research*, 10, 427- 456.

Berscheid, E., Snyder, M., & Omoto, A. M. (1989). The relationship closeness inventory: Assessing the closeness of interpersonal relationships. *Journal of Personality and Social Psychology*, 57, 792- 807.

Bracken, C., & Lombard, M. (2004). Social presence and children: Praise, intrinsic motivation, and learning with computers. *Journal of Communication*, 54, 22- 37.

Brave, S., Nass, C., & Hutchinson, K. (2005). Computers that care: investigating the effects of orientation of emotion exhibited by an embodied computer agent. *International Journal of Human- Computer Studies*, 62, 161- 178.

- Brown, P. & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Caplan, S. E., & Samter, W. (1999). The role of facework in younger and older adults' evaluations of social support messages. *Communication Quarterly*, 47,

- Klein, J., Moon, Y., & Picard, R. W. (2002). This computer responds to user frustration: Theory, design, and results. *Interacting with Computers*, 14, 119-140.
- Lee, E.-J. (2003). Effects of "gender" of the computer on informational social influence: The moderating role of task type. *International Journal of Human-Computer Studies*, 58, 347-362.
- Leichty, G., & Applegate, J. L. (1991). Social-Cognitive and Situational Influences on the Use of Face-Saving Persuasive Strategies. *Human Communication Research*, 17, 451-484.
- Lim, T. S., & Bowers, J. W. (1991). Facework: Solidarity, approbation, and tact. *Human Communication Research*, 17, 415-450.
- MacGeorge, E. L., Lichtman, R. M., & Pressey, L. C. (2002). The evaluation of advice in supportive interactions: Facework and contextual factors. *Human Communication Research*, 28, 451-463.
- Mayer, R. E., Johnson, W. L., Shaw, E., & Sandhu, S. (2005). Constructing computer-based tutors that are socially sensitive: Politeness in educational software. *International Journal of Human-Computer Studies*, 64, 36-42.
- Moon, Y. (2000). Intimate exchanges: Using computers to elicit self-disclosure from consumers. *Journal of Consumer Research*, 26, 323-339.
- Moon, Y. (2003). Don't blame the computer: When self-disclosure moderates the self-serving bias. *Journal of Consumer Psychology*, 13, 125-137.
- Morkes, J., Kernal, H., & Nass, C. (1999). Effects of humor in task-oriented human-computer interaction and computer-mediated communication: A direct test of SRCT theory. *Human-Computer Interaction*, 14, 395-435.
- Nass, C., & Moon, Y. (2000). Machines and mindlessness: Social responses to computers. *Journal of Social Issues*, 56, 81-103.
- Nass, C., Moon, Y., Fogg, B. J., Reeves, B., & Dryer, D. C. (1995). Can computer personalities be human personalities? *International Journal of Human-Computer Studies*, 43, 223-239.
- Nass, C., Steuer, J., & Tauber, E. (1994). Computers are social actors. In B. Adelson, S. Dumais, & J. Olson (Eds.), *Proceedings of ACM CHI'94 Conference on Human Factors in Computing Systems* (Vol. 1, pp. 72-78). New York: ACM Press.
- Nijholt, A. (2004). Where computers disappear, virtual humans appear. *Computers & Graphics*, 28, 467-476.
- Prendinger, H., Mori, J., & Ishizuka, M. (2005). Using human physiology to evaluate subtle expressivity of a virtual quizmaster in a mathematical game. *International Journal of Human-Computer Studies*, 62, 231-245.
- Reeves, B., & Nass, C. (1996). *The media equation: How people treat computers, television, and new media like real people and places*. New York: Cambridge University Press.

- Roloff, M. E., Janiszewski, C. A., McGrath, M. A., Burns, C. S., & Manrai, L. A. (1988). Acquiring resources from intimates: When obligation substitutes for persuasion. *Human Communication Research*, 14, 364- 396.
- Sarason, B. R., Pierce, G. R., & Sarason, I. G. (1990). Social support: The sense of acceptance and the role of relationships. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 97- 128). New York: Wiley.
- Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1998). The self-serving bias in relational context. *Journal of Personality and Social Psychology*, 74, 378- 386.
- Wang, N., Johnson, W. L., Rizzo, P., Shaw, E., & Mayer, R. E. (2005). *Experimental evaluation of polite interaction tactics for pedagogical agents*. Paper presented at IUT'05, San Diego, California, USA.
- Whitworth, B. (2005). Polite computing. *Behaviour & Information Technology*, 24, 353- 363.
- Wilkie, J., Jack, M. A., & Littlewood, P. J. (2005). System-initiated digressive proposals in automated human-computer telephone dialogues: the use of contrasting politeness strategies. *International Journal of Human-Computer Studies*, 62, 41- 71.
- Wilson, S. R., Aleman, C. G., & Leatham, G. B. (1998). Identity implications of influence goals: A revised analysis of face-threatening acts and application to seeking compliance with same-sex friends. *Human Communication Research*, 25, 64- 96.
- Wilson, S. R., Kim, S. M., & Meischke, H. (1991/1992). Evaluating Brown and Levinson's politeness theory. *Research on Language and Social Interaction*, 25, 215- 252.