

The Effects of Humanoid Avatar Gaze on Chat Communication in Virtual Worlds
Project Log

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SPSS Calculations (March 2008)

	face-to-face	involvement	co-presence	partner evaluation
Chat	3.951	4.338	3.191	3.824
Indirect	5.005	5.059	4.779	4.243
Direct	5.319	5.235	5.294	4.743

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
faceface	Sphericity Assumed	34.903	2	17.451	23.292	.000
	Greenhouse-Geisser	34.903	1.677	20.817	23.292	.000
	Huynh-Feldt	34.903	1.756	19.876	23.292	.000
	Lower-bound	34.903	1.000	34.903	23.292	.000

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
involvement	Sphericity Assumed	15.358	2	7.679	6.820	.002
	Greenhouse-Geisser	15.358	1.616	9.504	6.820	.004
	Huynh-Feldt	15.358	1.687	9.104	6.820	.004
	Lower-bound	15.358	1.000	15.358	6.820	.013

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
copresence	Sphericity Assumed	81.711	2	40.855	32.768	.000
	Greenhouse-Geisser	81.711	1.706	47.890	32.768	.000
	Huynh-Feldt	81.711	1.790	45.652	32.768	.000
	Lower-bound	81.711	1.000	81.711	32.768	.000

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
partner	Sphericity Assumed	14.398	2	7.199	9.004	.000
	Greenhouse-Geisser	14.398	1.216	11.841	9.004	.003
	Huynh-Feldt	14.398	1.238	11.632	9.004	.003
	Lower-bound	14.398	1.000	14.398	9.004	.005

Face to Face Pairwise Comparisons

Measure: MEASURE_1

(I) faceface	(J) faceface	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-1.054 [*]	.165	.000	-1.471	-.637
	3	-1.368 [*]	.247	.000	-1.990	-.745
2	1	1.054 [*]	.165	.000	.637	1.471
	3	-.314	.210	.432	-.843	.215
3	1	1.368 [*]	.247	.000	.745	1.990
	2	.314	.210	.432	-.215	.843

Involvement Pairwise Comparisons

Measure: MEASURE_1

(I) involvem ent	(J) involvem ent	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.721 [*]	.229	.011	-1.299	-.142
	3	-.897 [*]	.314	.022	-1.688	-.106
2	1	.721 [*]	.229	.011	.142	1.299
	3	-.176	.218	1.000	-.727	.374
3	1	.897 [*]	.314	.022	.106	1.688
	2	.176	.218	1.000	-.374	.727

Co-Presence Pairwise Comparisons

Measure: MEASURE_1

(I) coprese nce	(J) coprese nce	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-1.588 [*]	.238	.000	-2.189	-.987
	3	-2.103 [*]	.322	.000	-2.915	-1.291
2	1	1.588 [*]	.238	.000	.987	2.189
	3	-.515	.244	.127	-1.130	.100
3	1	2.103 [*]	.322	.000	1.291	2.915

2	.515	.244	.127	-.100	1.130
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Partner Pairwise Comparisons

Measure: MEASURE_1

(I) partner	(J) partner	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
1	2	-.419 [*]	.115	.003	-.709	-.129
	3	-.919 [*]	.280	.007	-1.626	-.212
2	1	.419 [*]	.115	.003	.129	.709
	3	-.500	.222	.094	-1.060	.060
3	1	.919 [*]	.280	.007	.212	1.626
	2	.500	.222	.094	-.060	1.060

In-Game Instructions (February 2008)

Hello, we will now begin preparing for the role playing session.

Before we begin let us first setup for the role play session.

We will first change the light settings to "Sunset"

Please do this by pressing ctrl + shift + n.

If you have trouble with this please let me know. When you are done please type yes.

Thank you. Now please right click on the spherical wooden object.

Once you do this please press "Sit Down."

Thank you. Now please clear your screen of any popups such as "Minimap," "Search," or "Chat History."

You can do this by clicking on the "X" found on the top right corner of each popup.

Once you are done please type yes.

Thank you. We will now enter "Mouse-look" mode for the viewer.

Please press "Esc" once, and then press the letter "M" on your keyboard once.

Once you have done that, you should enter the "Mouse-look" mode with a cross hair in the middle.

Once you have done that please type yes.

To type in Mouse-look mode you may need to first press "Enter" once.

For our final step, please direct the cross hair in the middle of your screen directly above my head.

You can do this by moving your mouse.
Once you are done please type yes.

Throughout all three role-playing sessions, please refrain from moving your mouse.
It is critical to maintain the same view throughout the session.
If you move your mouse by accident, please attempt to move the cross hair back to the original position.
Also, please do not open any popup windows such as chat history, unless instructed to do so.

I will now describe the procedure for this session.

We will conduct three distinct sessions at three minutes for each.
Please attempt to follow the context of the situation, as shown in the notecard.
Once the time of 3 minutes is up, we will repeat the session again under a different environmental condition.
However, the context/situation of the role play will remain the same.
We will essentially repeat the role-play.
When repeating the role-play, please act as if you have not chatted with the representative before.

To begin the roleplay session I will announce ---Begin---
To stop the roleplay session I will announce ---Stop---

Thank you for your patience. Before we begin, do you have any questions?
Thank you. We will now begin in 15 seconds.

Thank you. We have just completed our first session.
We will now repeat the role-play again for 3 minutes.
Before we begin, do you have any questions?
Thank you. We will now begin in 15 seconds.

Thank you. We have just completed our second session.
We will now repeat the role-play again for 3 minutes.
Before we begin, do you have any questions?
Thank you. We will now begin in 15 seconds.

Thank you for your participation. We have just completed the study.

Please promptly go to the following surveys, and answer the questions.
If you have any questions please do not hesitate to ask.
The first survey contains 9 questions, while the second survey contains 5 questions.
The order in which you answer the surveys does not matter.
http://www.surveymonkey.com/s.aspx?sm=XO_2fLakEwzrYD5fpPwG5TUA_3d_3d
http://www.surveymonkey.com/s.aspx?sm=FmIMStCH4brPd0Yf6mepeA_3d_3d

Role-play Instructions (February 2008)

General Description:

- Each role play session has been reduced to 3 minutes from the original 5 minutes.
- Each role play session will be conducted in three different conditions, while utilizing the same context.
- A conclusion for the negotiation of each session is NOT necessary. Even if no conclusion is reached, the conversation will stop after 3 minutes.

Context:

You are a customer that recently purchased an mp3 player from department store XYZ. The mp3 player did not come with a warranty. After two months of use, the mp3 player's sound jack no longer works, and as a result no sound can be heard. XYZ's policy on electronic returns is one month.

For this situation, you will be conversing with a senior customer care representative of the department store. Although the return period has ended, your goal is to successfully receive a refund from XYZ, since you did no deliberate damage to the mp3 player.

Please note that role-playing is not acting. You may freely react to this context in any manner you are inclined to choose.

Also, please note that no "action words" may be used during the role-play. For example you may not say "(Gets up and slams the mp3 player on representative's desk)." Please note that this role-play is strictly limited to a conversation.

If you have any questions please do not hesitate to ask. For the purpose of scheduling, Jeckel Thor will attempt to add you as a "friend" on Second Life. If you decline, please let Jeckel Thor know when you will be available to partake in a session.

Thank you.

Participant Consent Form (February 2008)

STUDY TITLE: Investigating Role-play Dynamics

PRINCIPAL INVESTIGATOR: Woohyuk Jang, Senior student at Virtual High School Ontario.

STUDY SUPERVISOR: Bongseog Jang, Computer Science Professor at Mokpo National University (South Korea). Contact information is jang@mokpo.ac.kr.

PURPOSE AND DURATION: This study involves a decision science experiment. We expect it to take about 20 minutes to complete.

PROCEDURES: You will partake in three role-playing sessions with a single partner. Each session will last 3 minutes. Once you finish the three sessions you will be asked to complete a post-experiment questionnaire that asks 14 questions.

PARTICIPANT REQUIREMENTS: Anyone may participate in this study.

COSTS, RISKS, AND DISCOMFORT: There are no anticipated costs, risks, or discomfort associated with this study, outside those normally encountered during game play for Second Life.

BENEFITS: Upon successful completion of the post-experiment questionnaire, participants will receive a compensation amount of One-Hundred Linden dollars.

CONFIDENTIALITY: The results of this study will be presented at a professional conference. However, your avatar name or other identifiers will not be used for any use other than for distributing your compensation for participation in this study. All information received from participants will be filed under a coded system of reference that does not involve the use of your Second Life name.

REQUEST FOR MORE INFORMATION: You may ask questions about the study at any time. Please e-mail me at wjang@yisei.com or email my supervisor at jang@mokpo.ac.kr.

WITHDRAWAL OF PARTICIPATION: Should you decide at any time during the study that you no longer wish to participate, you may withdraw your consent and discontinue your participation without prejudice. If you decide to withdraw from the study, please email wjang@yisei.com or contact Jeckel Thor on Second Life.

If you fully understand the conditions for this study and wish to give consent for participation please follow these instructions. Please contact Jeckel Thor on Second Life or email me at wjang@yisei.com if you have difficulty following these instructions.

1. Type in your Second Life name below. This will be used as a digital signature.
2. Save this notecard.
3. Send it to Jeckel Thor on Second Life

Second Life Name: _____

Laboratory Design (January 2008)

