

Assignment 4

Evaluating User's Emotional and Affective Experiences Playing Video Games with Whole Body Interfaces

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1.1 IMI/Enjoyment Questionnaire Data Analysis

After each session, the users were each given a simply questionnaire to fill out. On this, they were asked to deliver on a scale from one to seven their feelings to several questions about their game play experience. From here, we compiled the data into simpler terms, reducing them into four basic categories and gathering the average numerical response and the standard deviation of them in order to determine more accurately their feelings about their experience.

Participant 1

Participant One's (Hereafter referred to as One) data was very clear in depicting his/her level of enjoyment of the game, which appeared to be quite minimal. The correlation to One's overall enjoyment of the game seemed to, as per the results, come largely from the lack of perceived competence, which was a 1 across the questionnaire without any deviation from the mark. The lack of perceived competence in this subject may have contributed to not only poor performance, but also poor enjoyment levels. As well, possibly also related to the poor perceived competence levels, was the high tension rating One presented, also with a minimal .89 standard deviation rating.

Participant 2

Conversely, Participant Two (Hereafter referred to as Two) seemed to have a rather low tension rating and scored slightly higher (.5) on the enjoyment scale. Still not quite the level expected, Two's perceived competence at the game was still below the average, though closer and it seems that Two believed to have understood the controls better, calling into question how much perceived competence actually has to do with the enjoyment levels of the game. A parallel between the first two, however, seems to be a perceived choice at the task they were

performing, both One and Two seeing themselves with very minimal choice in the overall matter.

Participant 3

Our third participant (Hereafter referred to as Three) had the highest marks of the questionnaires and appears to have enjoyed the game more than the others. Three's totals, however, were still more average rather than the good that we had been hoping for. Three's perceived competence levels were the highest as was the enjoyment level, enforcing the notion that the perceived competence is an important factor to enjoyment over the tension levels, which scored between One's and Two's levels at 3.8. Conversely, it may have been perceived choice that also played a deciding factor, Three's score indicating that Three felt a greater measure of choice than One or Two.

1.2. Affective Content Analysis of Cued Recall Debriefing Session

The affective content analysis, and more importantly the comments themselves, were a great insight into the user's mind and our users were very clear on what they thought and felt about their game play sessions. So clear that the Pearson inter-reliability test all had them scoring very high on their correlation between raters.

At the very least, we managed to discover that our participants were not lying or exaggerating too greatly on their questionnaires, the numbers between the two in comparison to the users' comments during their debriefing sessions showing very accurately which users enjoyed the game and which ones were having difficulties. More important, however, were the comments gathered through the recall sessions, which shed light on any questions the questionnaires had left us with.

Participant 1

One, as both raters found, had nothing positive to say about the experience. While it may be important to note that One was laughing through much of the interview process, none of the remarks made were positive and One went through precisely what was giving her trouble during the session, from trying to figure out what the controls were to wondering what the game itself was asking and noting the lack of feedback.

Participant 2

Slightly more colorful with remarks about the session, Two seemed to have some difficulty focusing inward, though was very clear about what was causing frustration. Two's main difficulty seemed to come in the form of one of the game characters in particular from which feedback was constantly given to a point where Two became stuck and the character had nothing to offer for clarification. Two found the one most annoying factor to their game experience and focused on that rather than the experience as a whole for the most part.

Participant 3

Lastly, Three, whose experience was most enjoyable still had some rather interesting and clarifying comments about the experience. Three seemed more determined from his comments than the previous two, wanting to figure out how to use the system and becoming more satisfied when the puzzles had been solved over growing frustrated by not managing to figure it out.

The numbers that came out of the positive, negative and neutral statements gathered from the debrief sessions were very clear about how their experience had gone and seemed accurate, upon comparison, to the questionnaires filled out as well. Also, Three was the only one to complete the level successfully, which may have influenced the end result of

satisfaction with the game where the others met with failure and were consequently unhappy with their overall experience.

1.3. Parallels and Inconsistencies Between Questionnaire and Cued Recall Debrief Session

After our team collected all three participants' questionnaires and cued recall debrief results, we start to compare the data between these sections. In the "interest/enjoyment" part, the data are parallel in both sections. For the participants who showed low interest and enjoyment on the questionnaire results, they had comment such as, "I don't want to play the game more," and, "The game isn't that interesting." In the other hand, the participant who was enjoyed the game said he/she was having fun with the game.

At the "perceived competence" part, the questionnaire and cued recall debrief have parallel results too. When the participant describes he/she perform the required task no problem, the participant scales seven on the questionnaire. Whereas the participant who had a hard time to control the Wii controller, he/she scales the perceived competence to the lowest on the questionnaire.

Then it comes to the part of "perceived choice," the results between the questionnaire and cued recall debrief are paralleled to each other. The participant that rated this part very low complained he/she did not know what was going on in the game, and he/she has no choice to choose what to do next.

In the last part of comparison, perceived/tension, we noticed the results of both section are paralleled as well. One participant stated he/she was frustrated while playing the game, and she rated the perceived/tension very high. The other participant who rated perceived/tension lower didn't state were there any frustration on him/her. With the data given above, this

illustrates the parallel between all participants' questionnaire and cued recall debrief results.

1.4 Issues, Challenges and Strengths of Using the Cued Recall Debrief Method Versus the Questionnaire Method

Using the cued recall debrief involves a two-stage process. The first stage in our case consists of using a recorder to record the whole session. The recorder, a camera, is placed right above the subject's shoulder so to people watching it would appear as if it was the subject's own point of view. After the game play, the recording was played again to help the subject recall all the mental events that were happening during the game play. Then, we interviewed and videotaped the subject explaining about his actions while watching himself play through the videotape. By using this method, it becomes easier for subjects to recall what mental stage they were at or what mental events were happening at certain stages of the session. However, it is more difficult for the note taker to take down and differentiate between which comments are positive, neutral, or negative. Positive comments could sometimes be confusing due to the fact that its meaning is so close to that of the neutral.

One thing we realized about this method is that it might not give the interviewers any feedbacks on some of the questions that they wanted to ask, since the subject is supposed talking and recite his own thoughts without being given any directions. We also observed that during our interview session, subjects were fluent in verbalizing some of their mental events while at other time they felt it was difficult to describe in words what they were thinking or feeling at a certain point.

The second method we employed is the questionnaire method. In this case, after the subjects have played Wii Trauma Center the interviewers asked them about their state of mind during the game. Questions were stated in

the form such that the subjects can relate to their thoughts and feelings during game play. An example is "While I was working on the task I was thinking about how much I enjoyed it." They give a response from 1 to 7 with 1 being not at all true and 7 being very true. We observed that this method is much easier to perform than the cued recall debrief method. Since subjects do not need to worry about recalling their thoughts from a recording the interview process went much smoother. Also the separation of answers into the positive, neutral, and negative categories was much easier to perform.

1.5 Improving the Design of Trauma Center

Tip Feature

As no tool seems to be explained twice in the game, a little too much emphasis has been placed on the user's memory, which may not be in the mindset to remember precisely what all the tools do and the order in which they need to perform tasks in order to complete the operation. As such, we would like to propose a tip function that would activate upon the user's wishes to give them a hint as to what they need to do next in order to complete the operation successfully. This would reduce the frustration that appeared in several of our users who could not remember precisely what they needed to do in order to complete their operation and consequently failed.

More Feedback on Tools

As it currently stands, if the user does something with the tools and it is wrong, nothing happens. This is a bit strange for the user trying to figure out what to do next and decreases the realism of the game. To improve the realism as well as the feedback, we would like to suggest having the tools do something when used incorrectly, giving the user negative feedback in the form of greater injury or an incorrect incision that they then have to patch up. As well, this would add a new

dynamic to the game which would appeal to the sadistic players who would like to see just how badly they can fail at the game, especially when they get stuck and cannot figure out the next stage of the operation, and the graphics could compliment those sadistic desires.

Dual Mode and Story Choice

As our users did not particularly enjoy watching the "flavor text" and skipped through the story as quickly as they could in order to get to the game play, we suggest an option to just do the operation levels without the complimenting story. This would give users who have no interest in the story a chance to skip to the parts they enjoy rather than seeing how fast they can skip through the story. This would probably need to be accompanied by a high scores table with the chance for multiple players to try and beat preexisting scores in the game.

As such, the story would also need to undergo some changes to make the players want to select story mode. Under the story option, there could be the option for the user to create their own character, give him or her a unique look and send them out into the wide medical world with the chance of failure that would demote them rather than simply end the game and give them the choice to work their way back up. In this way, the user gets the illusion of choice while they are only following a few set storylines, switching between them depending on their competence level as a doctor, to a few set endings. The perceived choice created would help to make the story more interesting, knowing that something different happens if you do things differently, which would promote the replay value of the game as well.