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Event scenes in role-playing games

A study about focus during event scenes versus gameplay

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Abstract

This thesis investigates the level of focus a player is displaying while playing a role-playing game. The thesis tries to answer the questions if the level of focus is different while a player is watching an event scene versus during gameplay and if there is a difference in the level of focus displayed by new players versus experience ones. To answer this question a playtest was performed in the role-playing game Final Fantasy XIII and the player's reaction was recorded and documented. The result suggests that the level of focus a player is displaying is lower during event scenes than during gameplay.

Keywords: game design, event scenes, focus, gameplay, Final Fantasy XIII, role-playing games

Sammanfattning

Denna avhandling undersöker om nivån av fokus en spelare uppvisar under tiden denne spelare ett rollspel. Avhandlingen försöker svara på frågan om spelarens nivå av fokus är olika under tiden denna kollar på en event scene jämfört med under spelets gång och om det är någon skillnad på nivån av fokus för nya spelare i jämförelse med mer erfarna. För att svara på frågan så utfördes ett speltest i rollspelet Final Fantasy XIII och spelarens reaktioner spelades in och dokumenterades. Resultatet tyder på att nivån av fokus som spelaren uppvisar är lägre under event scenes jämfört med under spelets gång.

Nyckelord: game design, event scenes, fokus, gameplay, Final Fantasy XIII, rollspel

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1. Introduction

The role-playing genre is a genre that started as pen-and-paper games and has since moved on to be featured in computer games (Rollings, Adams 2003:347). The genre has a strong focus on storytelling and setting with customizable characters that change as the game progress (Rollings, Adams 2003).

One of the first modern role-playing games is the publication of “Dungeons and Dragons” in 1974 (J. Patrick Williams, 2006). This game is a tabletop game where multiple players play a storyline that is determined by a dungeon master.

Final Fantasy is a role-playing video game that in recent years have started to appear frequently on the computer platform (List of Final Fantasy video games 2015). Many of the Final Fantasy games are centered on a conflict where the group of characters the player controls have to battle and evil that wants to take over or destroy the world (Final Fantasy 2015). This thesis and the test will be limited to this game. It would be possible to assume that the result does not speak for all role-playing games but can be used as a guide when performing similar tests.

The purpose of this thesis is to find research and conduct a test to see if a player’s level of focus is any different when watching an event scene versus playing the game. I also want to see if there is a difference between those who have played a certain game before, compared to those who have not played it. My hypothesis is that the player’s level of focus will drop during an event scene (also called “cutscene”) because the pacing of the storytelling will change (Gamasutra 2015). Another hypothesis is that the players who have played before will have a lower level of focus because they have played it before and know what they need to do.

My definition of focus for this test is based on the player’s level of attention. The more distracted the player is the less focus the player is displaying. Distractions in this case are not meant as something bad by default. Distractions in this case is when the player shows a reaction to what he is seeing, and these reactions can be positive or negative.

2. Background

2.1. Computer role-playing games

Computer role-playing games is a genre that has derived from pen-and-paper games. Role-playing games is a diverse genre with games ranging from arcade games to graphic adventure games. There are two general traits that almost all role-playing games have in common and that is:

- Customizable characters that change during game progress.
- Strong storylines.

Two key features for a computer role-playing game are a good, well written story and a good character progression system (Rollings, Adams 2003:347-348).

The role-playing genre has two major settings when it comes to the worlds. These two settings are: the “Tolkienesque” fantasy setting and the Sci-fi setting (Rollings, Adams 2003:351). “Tolkienesque” means in this context that something is based on the works of J. R. R. Tolkien whereas Sci-fi is here denoted as a genre of fiction which deals with imaginative content that is plausible within the scientifically established context.

The game used for this thesis is the former fantasy themed computer role-playing game.

2.2. Target game: Final Fantasy XIII

Final Fantasy XIII is a role-playing game released on the Playstation 3 and Xbox 360 in March 2010. It was released on PC the 9th October 2014. The game’s story progression is chapter-based and in most chapters the player will see event scenes through multiple characters view (Final Fantasy XIII 2015). During gameplay the player have the ability to move around the field map while controlling a group of three characters. The player will move the party leader and the rest of the group will follow the leader (Final Fantasy XIII 2015).

2.3. Event scenes in computer games

Event scenes can be defined as “any non-interactive storytelling or scene setting element of a game” (Gamasutra 2015). There are many different types of event scenes. The game for this thesis uses fully-prerendered CGI pieces. These pre-rendered movies are extremely expensive and a movie with a length of two hours could cost up towards \$5,000,000 (Gamasutra 2015). The use of event scenes is to make the game’s world more real by reacting to the player and showing him the effects of his actions (Gamasutra 2015). Event scenes can also be used as a reward; the Final Fantasy series uses epic CGI event scenes to reward the player when it has reached a goal (Gamasutra 2015). One of the most useful functions of an event scene is to set the pacing of the game. It helps the game designer to lower or increase the pacing of the game if needed (Gamasutra 2015).

3. Materials and methods

For this thesis I have collected data through the following means:

1. A playable test where the test subject played a short session of a game.
2. A survey the test subject performed after the playable test.

The reason for the playable test was to gather the data on how focused a player was when playing. The purpose of the survey was to see if the test subject's perception of their own level of focus was the same as the one displayed in the test.

To perform the playable test I used a web camera to record the players while they were playing the game Final Fantasy XIII. To record the game session I used the software called Open broadcast software. To get time stamps for the player behavior I used a simple stopwatch.

3.1. Hardware and software used in the playtest

Open broadcast software is free software that is used for video recording and live streaming. The software supports an unlimited amount of scenes and sources and supports DirectShow capture devices such as web cameras (Open Broadcast Software 2015).

A scene is a list of all the sources you add to the scene. Examples of sources are: images, webcam input and window, monitor or game capture. Since open broadcast software supports an unlimited amount of scenes and sources the user can add as many sources as they need (Frequently Asked Questions 2015).

For the test I used a scene that consisted of a game capture to record the game, a webcam capture to record the player and a window capture to record a stopwatch. The reason for the game capture was to be able to see what the player saw when displaying reactions. The reason for the stopwatch was to be able to take time stamps for when the player displayed reactions.

The web camera used for the test was a Logitech C170 with a resolution of 1024x768 at 30 frames per second (Logitech 2015).

The purpose of the web camera was to record the players while they played the game to record any reactions displayed. The reason why I chose to use a web camera for my test was

due to its low risk, because they are easy to use and they let me see the reactions of the players.

3.2. Playtesting the game

The test was performed with the help of a computer, the game Final Fantasy XIII and a web camera. The test started with a player playing the game while being recorded. The length of the session varied heavily on the player's performance but the average game session was around fifteen minutes. The session contained both event scenes and gameplay elements.

When the player completed the test I saved the recording and manually documented any facial expression or body movement in an excel document together with time stamps for when these expressions happened. The time stamps were used to see if an expression was shown during gameplay or an event scene since the length of the gameplay elements varied for each person. I documented if these expressions happened during an event scene or during gameplay.

The expressions I looked for was:

- Any mouth movement.

Especially pursed, flattened or twitching lip movement as these are signs of frustration (Lips body language 2015). Puckered lips were also something I looked for since these are signs of desire (Lips body language 2015).

- Any head movement.

When it came to head movement I looked for any raising or tilting of the player's head because these are signs of interest (Head body language 2015). I also looked for any case where the player would lower their head because that is a sign of exhausting (Head body language 2015).

- Whenever the player changes position

One thing I looked for was if the player would move in the chair a lot. Repetition such as moving back and forth in a chair is a sign of boredom (Bored Body Language 2015).

- If the person looked away from the screen completely

If a person looks away completely from what she is focused on then that means that the person is distracted and bored (Bored Body Language 2015).

3.3. Survey

The survey was conducted after the player had playtested the game. The survey consisted of ten questions about the player's experience of the playtest. The questions of the survey were:

- Have you ever played Final Fantasy XIII before this test?

This was a yes or no question. The reason for this question was to see if previous experience with the game made the player behave differently.

- How much do you enjoy the genre "Japanese role-playing games"?

This question's purpose was to see if there was a relation between how much players enjoy the genre and how they behaved while playing.

- How much do you enjoy event scenes in said genre?

The purpose of this question was to see if there was a difference between players that enjoyed event scenes and those who did not.

- If given the choice, how likely would you be to skip an event scene in said genre?

The purpose of this question was to see how interested the player was when it comes to event scenes.

- While performing the test, how focused would you say you were during the gameplay elements?

The purpose of this question was to see if the player's perception of their level of focus were the same as the level they displayed from the recording.

- While performing the test, how much would you say that sources outside of the gameplay elements distracted you?

This question's purpose was to give the player a way of telling me if there was something that might have caused an outlier in the test data.

- While performing the test, how focused would you say you were during the event scenes?

As with the question about focus during gameplay, this question's purpose was to see if the player's perception of their level of focus during event scenes were the same as the level they displayed during the recording.

- While performing the test, how much would you say that sources outside of the event scenes distracted you?

This question had the same purpose as the one about distractions during gameplay elements. I wanted to know if there might have been anything that caused outliers in the test data.

- Which element did you enjoy the most?

This question was a scale between one and five where one was event scenes and five was gameplay. The purpose for this question was to see if there was a difference between players who enjoyed event scenes versus players that enjoyed gameplay.

- Finish this sentence: "Moms"

This question was a free text question. The sentence was taken from two event scenes in the test. I added this question because I thought it would show how much the player paid attention during the event scenes.

The general purpose of the survey was to have another form of data to validate the data from the recording and to see if the player's perception of their behavior matches the one they display while playing a game.

4. Result and analysis

The following chapter is about the player's expressions while playtesting the game and their answers to the survey. The purpose of the playtest was to see how the player reacted while playing a game. To see if there was a difference between those who have played the game before and those who have not there are multiple tables showing the difference between the data. Survey data has been collected to see if there is a relation between the player's feelings and their reactions while playing.

4.1. Data from the playtesting session

A playtesting session was performed where a person played a game while being recorded. The test was performed on ten different people with six persons who had never played the game before and four who had played the game before.

Table 1, 2 and 3 show the result of the playtesting. The top row shows the different types of reactions that I tracked. The different rows display how many times a certain reaction was displayed. The "During event scene" row shows how many times that reaction was shown during an event scene and the "During gameplay" row shows how many times that reaction was shown during gameplay. The "Percentage of distractions in event scenes versus gameplay" row shows how many percent of the reactions happened during an event scene.

Because different actions display a different level of distraction the ideal way would be if each different distraction had a distraction value based on how much distraction that reaction shows. For this test all reactions are valued the same. To get an equal value on every reaction the mean was calculated by adding all the percentage values and dividing them by the number of reactions. This value is shown in the bottom row "Mean of the percentages".

Table 1. Total players reactions (10 people)

	Head movement	Mouth movement	Look away	Change position
During event scenes	36	35	5	36
During gameplay	23	36	2	29
Percentage of distractions in event scenes versus gameplay	61,0%	49,3%	71,4%	55,4%
Mean of the percentages	59,3%			

Table 1 shows the numbers for all testers. The reaction that was shown the most was mouth movement with 71 occurrences. 35 of these happened during an event scene and 36 happened during gameplay which means that 49.3% of all mouth movement happened during event scenes. The second highest amount of reactions was to change position. This happened 65 times in total. 36 of these happened during event scenes and 29 happened during gameplay which means that 55.4% of the times it happened during an event scene. Head movement was the third highest with 59 total occurrences where 36 of them happened during an event scene and 23 of them happened during gameplay. 61.0% of all head movements happened during an event scene. If the total occurrences of all reactions are regarded, then there were 202 of these in total. 112 of these happened during an event scene and 90 of them during gameplay. The mean of all the reactions were 59.3%. The data shows that the level of focus on the total amount of testers was reduced during event scenes.

Table 2. Players who have played before and their reactions (4 people)

	Head movement	Mouth movement	Look away	Change position
During event scenes	15	9	1	11
During gameplay	4	11	0	13
Percentage of distractions in event scenes versus gameplay	79,0%	45,0%	100%	45,8%
Mean of the percentages	67,5%			

Table 2 shows the numbers for the group that had played the game before. The reaction to change position was displayed the most with a total of 24 occurrences. 11 of these were in event scenes and 13 happened during gameplay. 45.8% of all the times a player changed position happened during an event scene. The second highest reaction was mouth movement with 20 occurrences. 9 of these happened during an event scene and 11 happened during gameplay which means that 45,0% of all mouth movement happened during an event scene. The third highest was head movement with 19 occurrences. 15 of these happened during an event scene and 4 of these happened during gameplay. That means that 79,0% of all head movement happened during an event scene. The mean from this data has an outlier in that the look away data shows 100%. This means that the mean becomes an unreasonably high number of 67.4%. The mean without the outlier shows that 56,0% of all the distractions happened during the event scene. This number is a much more believable number. The data from the group that had played before showed that the level of focus dropped more for this group than the total average. This indicates to assume that one reason for the lower level of focus is because the players have already played the game before and seen the event scenes before. The players could also be annoyed that the event scenes were too long or that you could not skip them, a point that is addressed by Hugh Hancock (Gamasutra 2015).

Table 3. Players who have never played before and their reactions (6 people)

	Head movement	Mouth movement	Look away	Change position
During event scenes	15	20	1	24
During gameplay	15	22	1	15
Percentage of distractions in event scenes versus gameplay	50,0%	47,6%	50,0%	61,5%
Mean of the percentages	52,3%			

Table 3 shows the numbers for the group that had never played the game before. It shows that the most common reaction was mouth movement. This was displayed 42 times with 20 of them happening in event scenes and 22 of them happening during event scenes. The second most common reaction was to change position. This occurred 39 times with 24 of those happening during event scenes and 15 happening during gameplay. The third highest was head movement with 30 occurrences with 50,0% of these happening during an event scene. The mean of all reactions that the players who had never played before resulted in 52.3% which was lower than both the total mean and the mean of those who have played before. The data indicates that the level of focus on those who have not played the game before is higher during event scene than the total average and the group of players that have played before. This indicates that the players who have never played before were not as annoyed by event scenes as the group that had played and seen them before. They could also be more focused because they do not know what is going to happen during the event scene while the players who have played it before do.

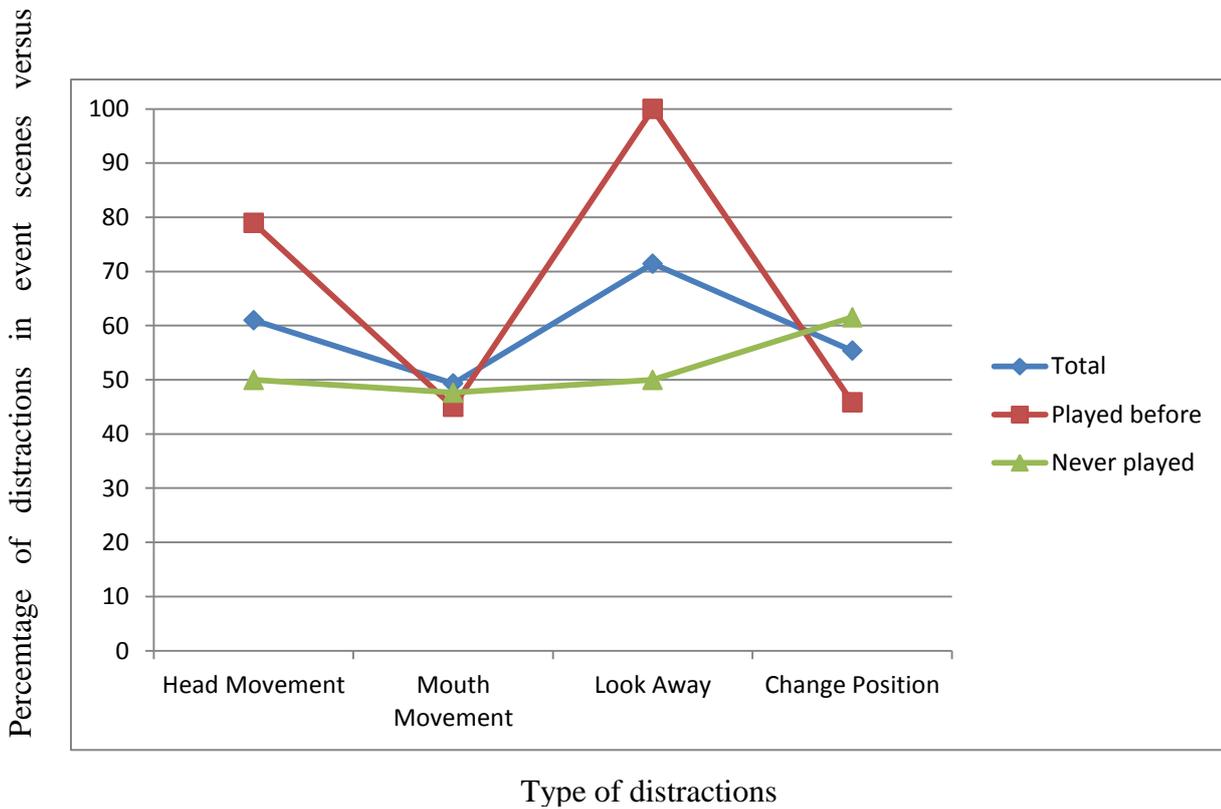


Figure 1. Differences between the groups

Figure 1 shows the difference between the different test groups. The group that had never played showed a result that was below the total when it came to all reactions except changing position. The graph shows the outlier data where the group that had never played before had all their “look away” actions displayed during an event scene. It is clear from this graph that the outlier affected the total “look away” data and lowered the accuracy of that category.

The data shows that the level of focus the players display drops during event scenes compared to gameplay. Though the difference is insignificant it was larger in the group that had played the particular game before, compared to those who had not.

4.2. Data from the survey

The survey was made to show if there was a relation between the player's feelings for a game and their reactions while playing the game. Table 4 below shows the average answer of the test groups. As with the playtest data, the survey data is divided into a "Total" category with all the answers from the testers, a "Never played" category with the answers from those who have never played the game before and a "Played before" category (defined as Q1 and thus omitted from Table 4), with the answers from those who have played the game before. All the questions could be answered with a number between 1 and 5 with a different meaning for each number on the different questions.

Table 4. Playtest survey

	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Total	3.7	3.7	2.2	3.7	1.4	3.6	1.3	3
Never played	3.83	3.83	2.17	3.5	1.5	3.67	1.33	2.83
Played before	3.5	3.5	2.25	4	1.25	3.5	1.25	3.25

Q2: How much do you enjoy the genre "Japanese role-playing games"?

The answers to this question ranged between dislike and like where one represents dislike and five like. If the average of the scale is to neither like nor dislike then the total answers are slightly positive towards the genre. The answers from those who had never played before were slightly more positive than the answers from those who had played the game before.

Q3: How much do you enjoy event scenes in said genre?

The answers to this question ranged between dislike and like where one represents dislike and five like. If the average of the scale is to neither like nor dislike, then the total answers are slightly positive towards event scenes. The answers from those who had never played before were slightly more positive than the answers from those who had played the game before.

Q4: If given the choice how likely would you be to skip an event scene in said genre?

The answers to this question ranged between very unlikely and very likely where one represents very unlikely and five very likely. If the average is to neither skip event scenes or to not skip them then the answer is in favor of not being very likely to skip event scenes. The answers from the players who had not played the game before showed that they were less likely to skip event scenes compared to those who had played the game before. Those who had played before were slightly more likely to skip event scenes compared to the total average.

Q5: While performing the test, how focused would you say you were during the gameplay elements?

The answers to this question ranged between very distracted and very focused where one represents very distracted and five very focused. The answers showed that the players felt that they were being focused during the gameplay elements. The group that had never played before answered that they were more focused than the group that had played the game before. If you compare the test data of the group that has played the game before and those who have not then you see that the group who have not played before displayed more reactions during gameplay than the group who have played before.

Q6: While performing the test, how much would you say that sources outside of the gameplay elements distracted you?

The answers to this question ranged between not very much and very much where one represents not very much and five very much. The answers to this question shows that the players did not feel distracted by outside sources during the playtest.

Q7: While performing the test, how focused would you say you were during the event scenes?

The answers to this question ranged between very distracted and very focused where one represents very distracted and five very focused. The answers showed that the players felt that they were being focused during the event scene elements of the game. The answers from the group that had never played the game before said that they were more focused than those who had played the game before. When you look at the test data you see that the group who had not played before showed less reactions during an event scene than the group that have played the game before.

Q8: While performing the test, how much would you say that sources outside of the event scenes distracted you?

The answers to this question ranged between not very much and very much where one represents not very much and five very much. The answers to this question shows that the players did not feel distracted by outside sources during the event scenes.

Q9: Which element did you enjoy the most?

The answers to this question ranged between event scenes and gameplay where one represents event scenes and five gameplay. The total average of this question showed that there was no preference between the gameplay elements and the event scenes. The different groups showed different results. The group of players that had never played the game before enjoyed the event scenes more while the group that had played the game before enjoyed gameplay more.

5. Discussion

Comparison between the survey data and the test data indicates that the players thought they were more focused during gameplay than during event scenes. The answers from the group that had played the game before indicates that they thought they were half a point more focused during gameplay than during event scenes. The test data indicates that their focus level was lower than the group who had never played before and whose difference between gameplay and event scenes were only 0.17 points. This increases the probability that having played a game before have an effect on how focused a player is when playing that game. Since the players with great accuracy guessed their level of focus it would also be possible to assume that the player have an active choice in how focused he decides to be.

The biggest problem with the test was that when I looked at reactions during data collection, I sampled some positive feedback with negative and counted it as negative. This due to mouth movement being counted as a drop in focus while it can show either frustration or desire (Lips body language 2015). What I could have done is to include a larger number of categories of body languages and classify every different mouth movement as their own category.

The test is limited by having a very small sample pool. With the small sample pool the numbers are not as indicative as if it would have been performed on a larger group of people.

6. Conclusion

The purpose of this thesis was to test if a player's level of focus was any different while watching an event scene versus during gameplay. What I thought would happen was that the level of focus the player was displaying during an event scene would be lower than it was during gameplay. My findings indicate that level of focus was lower during event scenes than during gameplay and calculating the mean of all the reactions resulted in 59.3% of all reactions happening during an event scene. I also wanted to find out if there was a difference between those who had played before and those who had not. My findings indicate that those who had played a game before have a lower level of focus during event scenes than a group who had not played before. In comparing the results of the survey with the test data the players show an understanding of how they reacted when playing the game. Both groups felt that they were more focused during gameplay than event scenes. The lower level of focus might not be a bad thing for the game. With pacing having an important role together with rewarding the player, event scenes could have their role to play in role-playing games.

For future research I would like to try to find a different method of measuring focus, in addition to the recruitment of a larger number of test subjects to obtain statistically significant results. I would also include more games in the test since this is a test of only one role-playing game and does not show a result that can be representational of the whole genre.

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