

The *Long Path of Frustration*: A Case Study with *Dead by Daylight*

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Abstract. Playability is a key factor in video-games. From a narrative standpoint, the play process is usually designed as sequences of episodes triggered by the player’s motivations, which unfold along a sense of suspense-relief. Suspense, as a factor on engagement, has a strong impact on the narrative of video-games: when it decreases, so does the engagement. This is a common pattern when players are aware that losing is unavoidable. As we point out, many players disconnect from the game in this situation. In this paper we evaluate how suspense affects playability, to analyse how the lack of uncertainty due to the knowledge of the rules may degrade *Dead by Daylight* game players experience when they are bound to fail. We have observed that players acknowledging that there are no chances to win tend to leave the game. Results also reveal that suspense is modulated by the player’s knowledge of the game.

1 Introduction

Narrative-based games may lead to situations where it is practically impossible to overcome a challenge unless the character is ready enough to face them, fact that not always the free plot is able to guarantee. The improvements that players incorporated to their characters can do nothing but prolong the encounter, that inexorably will end with a defeat. When players are aware that the situation is lost but not still finish, they may only watch impotently as the outcome progressively approaches (for example, waiting a number of turns in role playing games or the character’s life bar is completely drained in other action games). This way, if skills are insufficient to win but not to defeat instantly, game experience may become boring. Clearly about to fail, no more suspense is perceived beyond the chance of “touching” the enemy or emerging unscathed front any assault.

In these situations, players experience a cognitive and emotional state that we call the player’s *long path of frustration*. The interesting aspect of this effect is that it is not produced because the player is playing bad with respect to the

antagonist, or due to chance, but above all else due to his certainty regarding the rigidity of the game rules. Thus, while the immediate effect is: a) the certainty that it is not possible to do any useful action in the time this *long path of frustration* lasts; the secondary effect is b) the tendency to break the suspension of disbelief (individual's willingness to accept the world of the character as "real" [11, p. 515]) as a defensive mechanism for such frustration. Consequently, a third effect is c) the feeling that the time in which this *long path of frustration* occurs is a waste, because the player is not in control [10, p. 13].

This *long path of frustration* becomes especially important in the field of suspense video-games as narrative discourse. Effect a) implies that chances of plot twist are limited in comparison with the design of classical discourses such as cinema or literature. These limitations are mainly based on the "narrative paradox" or how to reconcile the needs of a participant user rather than a spectator with the idea of narrative coherence [1, p. 35]. In a film or a book, a group of unprepared characters could face a potential stronger antagonist, and the audience might still have the hope that the author would come to a solution that includes in the story an "investor effect" who helps them overcome. Since the germ of suspense is the approach to a crucial outcome, until the fatality becomes irreversible the emotion persists along with the hope of avoiding it [18, p. 134-139]. However, in the case of video-games such irreversibility occurs when it is known that the rule system can only lead to the fatal denouement. Because there is nothing the player can do to avoid this, the time between this certainty and the arrival of that outcome is a long path of frustration for the player.

As referred by aforementioned effect b), there is a tendency for the players to "quit the game" if they are detected, since they can not break the rules. Studying the behaviour of *YouTubers'* gameplays, from the moment they begin their *long path of frustration* and without having finished the game, they tend to start to make references to the video-game itself as an interactive system, instead of describing their experiences in the context of the game. They talk about how wrong they has played and the unfairness of the game, usually questioning other characters' strategies. There are some players who simply and directly disconnect from the game.

As an example, in *Shadow Tactics*⁵[12], a real-time infiltration game, players tend to reload from the last checkpoint when they are discovered, for example, although it is still possible (but more difficult, as a penalty part included in the game design) to hide again and try to find another way to solve the situation. Just as another example, in *Metal Gear Solid V: The Phantom Pain* [9] enemies will be provided with flash-lights and night-vision goggles if they detect our character during a nocturnal incursion. Being detected makes players reload the game at the point they have not still found.

This strategy supposes a "time-travelling" to a previous state when the player has again the control of a more solvable situation. Otherwise, the existence of new enemies or skills in the scene will require much more time studying possible

⁵ German Developer Award 2016: Best Game Design, Best PC/Console Game and Best German Game.

ways of solving it. Because experience with the game indicates that players are not likely going to solve the new situation [2, p. 97], the effect c) appears because they perceive that the effort employed in solving it does not worth it. They feel they are wasting their time.

At present, our research about suspense effects and their computational modelling has led us to the review of suspense in different narrative discourses and interactive techniques such as video-games. In particular, we have found the same *long path of frustration* and its resultant disconnecting trend among all the players while analysing suspense responses in cooperative/competitive games like *Dead by Daylight* [3] or *Friday the 13th* [8], where there is no artificial intelligence and all the characters are handled by human players.

Moreover, in cooperative games, the consequences of those disconnections due to the conviction of “waiting for nothing” are not only limited to the relation of the frustrated player with the video game, but it also affects to the rest of the participants: although the player’s character could not actively participate in the game, could still be part of the antagonist’s universe and, as a consequence, could cause a distracting effect. Consequently, other players may take advantage of this situation because they have more time to perform other actions. Furthermore, a disconnection of the player may even lead to the premature termination of the game for all the players if he is hosting the P2P game server.

On that basis, the present work is based on the following hypothesis:

Knowledge of rules influences cognitive and emotional aspects related to the player disinterest.

Although there exist some proposals in the literature to increase the playability of video games, to our best knowledge there are no authors who deeply analyse how suspense influence it nor, alternatively, its conservation through the increase of the domain of solutions. In this respect, in this article a study is carried out to verify the existence of the *long path of frustration* effect and a design proposal is provided to take into account this effect. In Section 2, a preliminary analysis through the review of gameplays published in *YouTube* is presented. Based on this information, an experiment that relates the player’s safety to the rigidity of the rules of the game and the perception of suspense is presented in Section 3. Finally, Section 4 and Section 5 are intended to discuss the proposal and conclude this paper, respectively.

2 Preliminary Analysis

In order to design a focused experiment providing insight about how players react to the decrease of suspense in video-games, we first ran a preliminary analysing of gameplays in which this happens. The analysing was run against *Dead by Daylight*, a suspenseful video-game in which a killer chases, wounds and hangs the characters to death in a closed scenario. The skill of the game controlling the killer and the specific circumstances were also recorded. Although relative influential, other aspects like the environment, experience as a victim or other

character features were discarded in order to keep the study focused and to provide a well scoped analysis.

Dead by Daylight is a match-based, multi-player game which takes place at night, in an outdoor map with three fundamental elements: electricity generators, hooks and exit doors. Four players (the victims), starting with a full blood/life bar, cooperate with each other (more or less intentionally) trying to switch on five generators. When the fifth generator is switched on, the exit doors are activated and can be opened after a short time. On the other hand, the player who acts as the killer (only one) must try to kill all the players, hitting them with his or her weapon⁶. In case of knocking a victim down, which usually requires two strokes, the killer can wait to bleed themselves out or hang them on one of the hooks. The victim is finally eaten by a monster called *the Entity* (who is only showed its spider-like legs) after a short time in the hook. While the killer drags a victim to one of the hooks, the victim may struggle to free himself. The farther the hook, the more possibilities for the victim to escape. Otherwise, once on the hook the blood bar decreases gradually. Then, the victim goes through three different phases: 1) if the blood bar is above the half value and it is the first time the victim is hung, he or she can escape by himself (although the probability is low) or can be unhooked by another player; 2) if the blood bar is under the half or it is the second time the victim is hung, *the Entity* appears and the player must fight against it pressing the space key until being rescued by another player or the blood bar is exhausted; 3) if the player stops fighting, the blood bar is exhausted or the victim is hung for the third time, *the Entity* kills the player.

2.1 Method

Gameplays were collected as follows: first, recent games were chosen over older ones to increase the probability to analyse the behaviour of experienced players. Secondly, in order to avoid subsequent video editions that may have cut part of the content, only live videos that were published directly from the game were selected, which we also reviewed. Taking into account these two criteria, a search on *YouTube* was made using the phrase “Dead by Daylight Livestream”, and the results were sorted by publication date. As an additional condition, those games where players communicated among others players through microphones and headphones were discarded to avoid additional advantages beyond the pre-established rules, which may decrease suspense. We finally obtained a set $C1$ (control group, without any particularity) of 26 videos (a total of 164 games) from 24 different *YouTubers* ($mean_{C1} = 6.31$ games per video, $stdev_{C1} = 4.05$), all published between December 31, 2016 and January 2, 2017.

We also collected gameplays of experts players playing as killers in order to analyse if the chance of disconnection depends on the killer experience and the resources the have acquired (players gather experience points each game, serving these for improving characters’ abilities). For this reason, *Dead by Daylight* play

⁶ Victims know when the killer is approaching because of a increasing heartbeat sound, urging them to run away.

lists published by twenty *YouTubers* were examined in order to choose the one with more videos and experience. The user chosen was GENUINE993, with 129 videos of four games each and more than 300 hours in *Dead by Daylight* on Steam. Although this player does not publish live matches (only recordings), they were all checked to verify that there was no post-production beyond adding an introduction and the face of the player to the video. From this set C_2 (games with GENUINE993 as experienced killer in which no victim was a subscriber), the 30 most recent videos or a total of 71 games as killer were reviewed ($mean_{C_2} = 2.37$ games per video, $stdev_{C_2} = 0.63$). Other 49 games with subscribers, coming from 24 videos, were also collected in a new set C_3 (games as experienced killer, being all victims obtained randomly from his subscribers; $mean_{C_3} = 2.04$ games per video, $stdev_{C_3} = 0.04$). This was done in order to check differences between playing with or without subscribers. Games took place between November 11 and December 31, 2016.

The analysis of each video consisted on visualizing the summary screen of each individual game, which shows the disconnections of players by the symbol of a cable unplugged⁷. When disconnections were found, conditions of the game prior to that disconnections were reviewed. Disconnections were classified according to the circumstances of the player at the time of his or her disconnection: *in Danger* in the case of threat (about to be hung, about to die [blood bar under 25%], lying on the ground, pursued by the killer or injured less than ten seconds before); and *unknown* in case of the disconnection occurs in other circumstances, which also includes reasons beyond the player’s control as network slowdowns, main server failures or game host outages.

2.2 Results

From the set of games C_1 (control group in which capabilities of characters were not considered), 14 *in Danger* disconnections and 24 *unknown* disconnections were registered. Taking this into account, *in Danger* disconnections occurred in 8.54% of the analysed gameplays. On the other hand, in the game set C_2 (games with an experienced killer) the number of *in Danger* disconnections did not change (affecting 19.72% of games), and *unknown* disconnections decreased to 5. Finally, there were no disconnections *in Danger* in the set of games C_3 (games with an experienced killer, who plays with his subscribers as victims). This may be explained because the satisfaction the player experiment when sharing a video with subscribers is higher than the objective of the game, so the player tries to prolong the experience. Anyway, 3 *unknown* disconnections were still registered in this set. Table 1 shows the results obtained for each group.

A discrepancy is observed between the higher number of *unknown* disconnections of the group C_1 with respect to the other two groups. The reason is that this type of disconnections, which not infrequently occurs at the beginning of the matches, are not removed from the live gameplays in C_1 , in contrast to the

⁷ In case the *YouTuber* ignored this screen, the video progress bar was displaced to the last moments of the game, manually checking the status of each player.

Table 1: Percent of disconnections per games, group and type of disconnection

disconnection / group	<i>C1</i>	<i>C2</i>	<i>C3</i>
<i>in Danger</i>	8.54%	19.72%	0.00%
<i>unknown</i>	14.63%	7.04%	6.12%

gameplays of the chosen *YouTuber*. Therefore, it is likely that the total number of *in Danger* disconnections of the groups *C2* and *C3* will also be greater in the games played but these are probably not published.

Obtained results suggest the existence of a relation between the escape possibilities and players disconnections. On average, potentially almost one in eleven games has at least one player who quits because of a *in Danger* situation, while in case of an experienced killer this is as high as one in five.

This preliminary analysis provides useful insight, though far from yielding concluding results. Obtaining videos from *YouTube* is straightforward but, given the lack of control of how videos are produced, a real evaluation must be performed. Next section details how this has been tackled for the current research.

3 Experiment

Once we obtained insight about the relation between possibilities of escaping and players disconnections, we carried out an experiment trying to confirm our hypothesis about how knowledge of rules influences cognitive and emotional aspects which to the player’s disinterest. A set of eight scenes of *Dead by Daylight* were screened to the participants in the experiment. For each scene and participant, we collected a number of questions about the perceived suspense, the perceived chances for the character to escape and player own enjoyment.

A total of thirty seven undergraduate students ($N = 37$; seven women, thirty men) from the University of Cadiz, with ages ranging from 19 to 40 years ($mean = 23.70$, $stdev = 4.32$), voluntarily took part in this experiment. A total of 2923 data records were collected. Participants were divided in three groups: Group *A* ($N_A = 12$, all men), composed by participants with previous experience in the game (at least 50 gameplay hours); Group *B* ($N_B = 11$; three women, eight men), and group *C* ($N_C = 14$; four women, ten men), both randomly composed by participants without previous knowledge about the game.

We decided to stick to canonical narrative structures in order to approximate general accepted notions of what a narrative is. Therefore, scenes were chosen to evoke suspense through a similar narrative plot keeping the Freytag’s curve [6]. Therefore, selected sequences were focused in one specific victim (per sequence) and they contained the following stages: 1) *pre-exposition* stage: the victim is busy doing something (searching, repairing a generator, breaking a trap...); 2) *exposition* stage: the victim stops performing her current task and starts to walk; 3) *rising action* stage: the killer gradually approaches, discovers and ultimately knocks the victim over; 4) *pre-climax* stage: the killer holds the victim up and goes to the closest hook; 5) *climax* the victim is about to escape by his own

means, he is being unhooked by a partner or she is about to die; 6) *falling action*: the victim runs away; and 7) *denouement* stage: the heartbeat that indicates the killer proximity is not heard anymore. Stages 6 and 7 are replaced by the pre and post game scene of death in the case of the victim finally dies.

For the elaboration of the sequences, *Dead by Daylight* gameplays have been obtained from *YouTube*. In this case, unlike the analysis presented in Section 2, these recordings were just used as basic material, and the in-game reactions were not measured. They were only meant to serve as a basis for providing post-processed videos to the evaluators.

We set four requirements for the chosen gameplays: they must contain the aforementioned stages, they must not have comments (whether spoken or written), they must not have conversations between participants and they must have sufficient video quality (720p minimum) so that the resolution did not influence the viewers' perception when screening in a standard projector. To do this, we searched on *YouTube* using the expression "dead by daylight no-comment", studying the first page results, measuring a total of twenty. Among all the candidates met the referred criteria, **Lizzy Beam** was the selected user, due to the largest number of videos on his *Dead by Daylight* playlist, counting 214 videos.

Videos were reviewed from the most modern to the oldest, choosing gameplays where any victim is pulled to a hook. The scenes were selected by taken into account they have to take place in the same scenario and with the same killer⁸, in order to avoid variability in the perceived suspense due to the scenario.

Since some game events are more likely than others, candidate gameplays were filtered proportionally in terms of these events (the percentage was kept and the amount was normalized). Finally, eight videos were selected: the victim escaping from the hook by himself (*EBH*); the victim saving another player from the hook (*SPA*); the victim being unhooked by another player (three different episodes, *SBP1*, *SBP2* and *SBP3*, with different characters); and the victim dying in the hook even starting from maximum level of blood (three different episodes, *DFM1*, *DFM2* and *DFM3*, also with different characters).

Selected gameplays were then post-processed with Adobe Premiere Pro CC v11.0 in order to obtain a homogeneous aspect, normalize sound volume and re-synchronize audio and video. Each gameplay was trimmed to extract the part of the scene corresponding with our Freytag's curve based design of stages. In that way, influence of non-related sub-episodes is avoided (it would make the analysis more complex and the results less conclusive). The final duration of the sequences varies between 1'23" and 3'31" (*mean2m16s*, *stdev = 34s*). All these sequences were later edited to obtain a second version of each one in which left and right lower zones of the screen were covered, in order to hide any information about the state of the group or the skills of the characters.

Finally, videos were randomized before to start the experiment. The order was: *SPA*, *SBP1*, *DFM1*, *EBH*, *SBP2*, *SBP3*, *DFM2*, *DFM3*. The same order is used for the three groups.

⁸ In the current version, *Dead by Daylight* has six different killers and scenarios, for a total of thirty six different combinations.

3.1 Method

Separately, each group was brought in a classroom. Participants were randomly placed, keeping an empty table between each pair. After a demographic survey, another questionnaire was given to each participant in which they had to answer the following three questions: *how much suspense does the situation generate?*; *what hope do you think the character has to escape?*; and *what degree of enjoyment are you experiencing?*. The responses to questions are given in a 4-likert scale with the following values: *none*, *low*, *high* and *very high*, corresponding to values ranging from 1 to 4, respectively (numbers at left, in Figure 1).

The experiment was carried out by group *A* (participants with previous experience in *Dead by Daylight*), then for the group *B* and finally for the group *C*, both without any experience or knowledge about the game. To differentiate these both groups and prior to play the video sequences, the rules of the game were clarified for the group *B*, emphasizing the circumstances in which a character cannot escape. This clarification was not made for the group *C* and, in addition, the screened videos were those edited to hide the state of the group or the skills of the characters. Therefore, group *C* had almost no knowledge about the game rules besides intuitive assumptions about the scene it represents.

For each video sequence, the participant's emotion was evaluated during three different situations: state *0*, once the victim is captured and seized by the killer, being still able to escape by struggling; state *1*, when the victim is hung on the hook but *the Entity* has not yet appeared, being able to escape by jump only if it is the first time in the hook (otherwise, being unhooked by another player is the only way out); and state *2*, when *the Entity* appears and the only possibility is to be saved by another player, if any is available for. The screening was paused when the character entered a new state so participants could fill in the answers to the questions for the current instant. The screening was resumed after five seconds. Once a complete scene was ended, a new one began. The experiment finished after all the eight video sequences were played.

3.2 Results

Obtained values evidence clear differences between scenes where chance to escape is possible against those in which death is unavoidable. Regarding *suspense*, the first case shows differences among groups tend to be small and even non-significant ($\chi_0^2 = 29.994$, $p < 0.000$, $\chi_1^2 = 9.993$, $p < 0.007$, $\chi_2^2 = 3.018$, $p < 0.3$), around *high* for all states. On the other hand, differences are remarkable when escaping is not possible ($\chi_0^2 = 54.882$, $\chi_1^2 = 56.815$, $\chi_2^2 = 56.997$, $p < 0.000$). Specifically, group *A* reports a *none/low* value of *suspense*, group *B* values decrease from *low/high* in state *0* to *none/low* in state *1*, and group *C* increases its *suspense* from *high* in state *0* to *very high* in states *1* and *2*.

Similarly, reports about *hope* do show a weak and barely significant difference among groups in the case of chances ($\chi_0^2 = 22.112$, $p < 0.000$, $\chi_1^2 = 0.756$, $p < 0.7$, $\chi_2^2 = 5.856$, $p < 0.06$), with *low* average values in all the states for groups *A* and *B*, and some fluctuation from *high* to *low* for group *C*. Nevertheless, if

there is not escape, *hope* values for groups *A* and *B* are similar to their respective *suspense* values, while group *C* does not show differences in *hope* with respect to the case that escaping is possible ($\chi_0^2 = 23.043$, $p < 0.000$, $\chi_1^2 = 10.616$, $p < 0.005$, $\chi_2^2 = 23.471$, $p < 0.06$).

Lastly, in the case of chance *amusement* decreases from *high* to *low* for group *A*, *high* in average for group *B* and from *high* to *very high* for group *C*, increasing the difference of reported values state by state ($\chi_0^2 = 5.5794$, $p < 0.07$, $\chi_1^2 = 35.856$, $p < 0.000$, $\chi_2^2 = 59.855$, $p < 0.000$). On the other hand, if evasion is not possible, reported *amusement* for group *A* is *low* (just in state 0) or *none*, group *B* maintains a *high* value for all three states, and group *C* goes from *high* to mainly *very high* ($\chi_0^2 = 28.291$, $\chi_1^2 = 37.773$, $\chi_2^2 = 53.802$, $p < 0.000$).

In contrast to *suspense* and *hope*, *amusement* presents a significant difference between groups *A* and *B*. We may attribute this to the fact that participants of group *B* had never watched a *Dead by Daylight* gameplay: watching character deaths, even when expected, can be a new (and seemingly funny) experience.

Figure 1 illustrates the evolution in each state per group of *suspense*, *hope* and *amusement*, respectively, grouping by chance to escape.

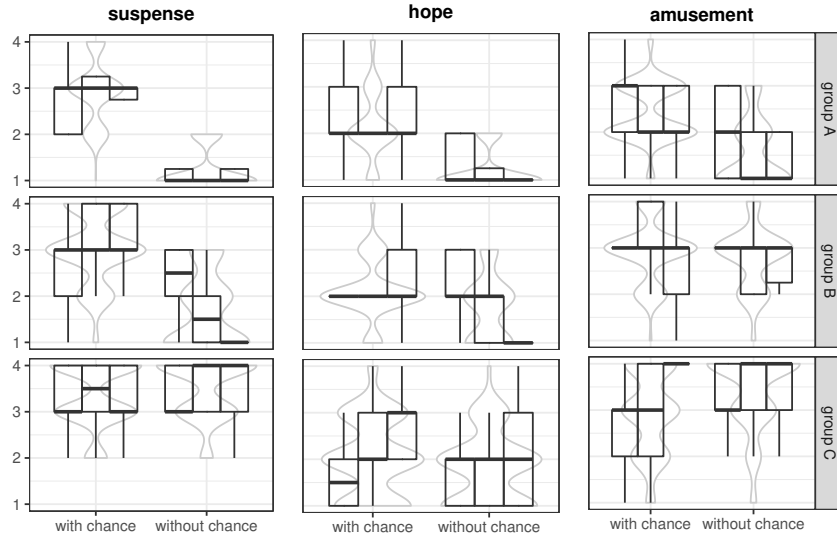


Fig. 1: Reported states evolution per group/chance (states 0, 1 and 2)

With respect to relations between reported emotions, correlation between *suspense* and *amusement* is significant and expected in all three states ($\rho_0 = 0.272$, $\rho_1 = 0.485$, $\rho_2 = 0.547$, $p < 0.001$), although the weak dependency in the initial state can be observed when the intentions of the killer are still unknown⁹.

⁹ Killer can abandon to the victim on the floor, bleeding to death. This is an usual strategy when there are not hook near around.

A relation between *suspense* and *hope* is also observed in the states *0* and *1*, being moderate/weak ($\rho_0 = -0.302$, $\rho_1 = -0.188$, $p < 0.001$). In addition, an inversion occurs in the state *2*, becoming a weak uphill ($\rho_2 = 0.232$, $p < 0.001$).

Weak correlations between *suspense* and *hope* and the inversion in the state *2*, may be explained when effects of knowledge about the victim fate are reviewed. As expected, when there is confidence about the chance to escape, *suspense* in all states is up to moderately downhill relation to *hope* for group *A* ($\rho_0 = -0.534$, $p < 0.001$, $\rho_1 = -0.659$, $p < 0.001$, $\rho_2 = -0.445$, $p < 0.01$), group *B* ($\rho_0 = -0.383$, $p < 0.01$, $\rho_1 = -0.687$, $p < 0.001$, $\rho_2 = -0.491$, $p < 0.01$) and group *C* ($\rho_0 = -0.619$, $p < 0.001$, $\rho_1 = -0.311$, $p < 0.01$, $\rho_2 = -0.231$, $p < 0.2$). An exception can be observed in group *C*, where the relation between *suspense* and *hope* significantly decreases, until a non-significant weak relation is reached.

Paradoxically, the situation is reversed when the victim has no chances and the participant has experienced in the game. In that case, reported *suspense* is not related to the low *hope* for surviving. Thus, for group *A*, correlation between both variables is equally moderate, but close to the limit of significance as opposed to the case where chances exist ($\rho_0 = 0.476$, $p < 0.05$, $\rho_1 = 0.415$, $p < 0.05$, $\rho_2 = 0.361$, $p < 0.1$). For its part, group *B* shows an oscillating non-significant relationship ($\rho_0 = 0.396$, $p < 0.1$, $\rho_1 = -0.297$, $p < 0.1$, $\rho_2 = -0.149$, $p < 0.6$). However, there is still an increasing downhill correlation for group *C* ($\rho_0 = -0.373$, $p < 0.05$, $\rho_1 = -0.466$, $p < 0.05$, $\rho_2 = -0.669$, $p < 0.001$), where the value grows as the states approximate to the death of the character.

Summarising, the observed values are in line with the proposed hypothesis; that is, the knowledge of rules influences the emotional aspects related to disinterest. If there is any possibility to escape, all three groups report a *high* value of *suspense* for all the states. Otherwise, group *A* reports a *none/low suspense* which gradually is reached by group *B* too. Emotion is only maintained by group *C*, where *very high* value is reported. This is mainly consistent with reported *hope (low)* when escape is still possible. If surviving is not possible, *suspense* and *hope* get alike for groups *A* and *B*, reaching *none/low*. Finally, in comparison to the other groups, *amusement* is lower for the group *A*, falling to *none* when it is impossible to escape; group *B*'s *amusement* is reported as *high* for all states. Likewise, group *C* reported a *very high* level for states *1* y *2*.

4 Discussion

Despite this results, some games based on the systematic death of the character have been very successful. A well-known example is *Demon Souls* [7] and similar games of *From Software*'s, in which the character can easily die [16, p. 17]. While some authors relate this difficulty to a discursive context of ubiquitous self-surveillance [15, p. 2], criticism about the excessive difficult can be easily found on the Internet. In our opinion, this criticism is related to the same emotional mechanism that provokes the *long path of frustration*. Moreover, we defend that too much and continuous deaths directly affect to the suspension of disbelief, which is a key point for player engagement.

Moreover, the experiment has only been run with a single type of killer (a male masked Jason Voorhees style taken from classical slasher movies [14]) and environment (in a forest, as archetype for Gothic games [13, p. 103]). The literature, however, reports on emotional differences when the gender, environment and the aspect of characters vary [14, 5, 4]. Additionally, differences could be expected between participants genres. This limit is aggravated by the fact that the percentage of female participants is low, which does not yield sufficient data to discard the influence of genre. Furthermore, it was not possible to find a woman with experience in *Dead by Daylight* among the available participants.

We need also to emphasise that the effect of suspense in experimental prototypes and practical narrative are often not the same. Stories developed through research projects generally create much shorter and less intense narrative experience than films, novels or story-centered commercial games do [17, p. 338]. We have taken this effect into account to interpret the results adequately.

5 Conclusions and future work

We have introduced the idea of the *long path of frustration* as an emotional state of the player. This state arises during the period between the certainty that current events lead irremediably towards the character's fail and the failure itself, due to the lack of uncertainty because of his knowledge of the game rules.

A preliminary analysis based on published gameplays of the game *Dead by Daylight* has evidenced that between 8% to 20% of gameplays end up with disconnections, presumably to try to avoid this frustration. The harder the antagonist plays, the more disconnections are observed. After this analysis, visualization of gameplays were compared, taking into account the previous experience of the participants and their knowledge about the rules.

Results show that experience and knowledge significantly affect the perception of suspense, the hope that the player will achieve his goal and, finally, the audience amusement. The conclusions of this study reflect that the audience has more fun when rules are unknown. In these cases, when viewers notice the impossibility of overcoming the situation, suspense and amusement grows significantly, in contrast with the cases of experimented audience. The experiment also reveals a relation between this decrease and the number of disconnections.

Based on the evidences and the objective of this study, we are working on a proposal of game design that takes the *long path of frustration* into account as an inherent part of playability. We aim to reduce its emotional effect and, consequently, players' disengagement.

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