

The Embodiment of Kübler-Ross Model through Game Elements in GRIS and Its Impact on Player Experience

Ni Putu Anindhitha Ayesha Sandra^{1,*} Intan Rizky Mutiaz²

¹ Faculty of Art and Design. Institute of Technology Bandung, Indonesia

² Faculty of Art and Design. Institute of Technology Bandung, Indonesia

*Corresponding author. Email: anindhitha.ayesha@gmail.com

ABSTRACT

GRIS is a platform-adventure video game developed by a Spanish developer Nomada Studio and published by Devolver Digital in December 2018. This game tells a story about a journey of a young girl who struggles to overcome her depression and fear. The phenomenon of GRIS as a visual representation of depression is seen as a befitted mean that explains the correlation between immersive-interactive media and real-life events experienced by the sufferers. This research article discusses the understanding of how game elements in video games such as GRIS delivers an immense impact on its players and how it reflects the psychological experiences of depression sufferers. Furthermore, this article discusses these game elements were used in the game to describe Elizabeth Kübler-Ross's 5 Stages of Grief Model and properly portray a psychological journey through an immersive game story. This research is conducted using a descriptive qualitative approach with phenomenological methods. Data obtained through observations toward GRIS and analysis of interpretations from 7 GRIS players who also have experiences with overcoming depression, obtained using in-depth interviews. Based on the observations and interviews conducted, the results are concluded that (1) there are debates on how depressive experiences were portrayed and presented on media according to players' actual personal ordeals and struggles, and (2) there is a mapping of game elements identified that builds communication through an impactful gaming experience. The results of this study can be used as a guide for further research and developing other story-rich game designs to improve emotional engagements with players.

Keywords: Video games, game experience, game elements, the Kübler-Ross model.

1. INTRODUCTION: GAME EFFECTS ON MODERN SOCIETY

A video game is an interactive digital media that is generally used for entertainment purposes through its fun and interactive strengths comparing to any other digital media. As advanced digital technology goes, more video games are developed and published to serve many purposes, including communicating with the player. Video game communicates through visual, audio, video, and human interfaces to engage with players, regardless their gender, age, occupation, social class, or even nationality [1]. In this digital era, video games hold important roles as digital media that could be used for several purposes. One of these purposes is as an educational media to share, discuss, and even to criticize several real-life

issues and conflicts such as issues in politics, lifestyles, mental health, even as far as human behaviour in a certain community [1]. In its role as an interactive and communicative media, a video game could be as simple as a five-minute duration of gameplay to deliberate such an important topic. For example, an indie video game called *We Become What We Behold [Fan-Made Port]* developed by Nicky Case and published in 2019 by Mismatch Studio which rotates heavily on how social media affects human trends and behaviour in a society, shows that the most basic and harmless stories could be turned into absolute chaos. Another example could be seen from another video game called *Whack Your Boss* developed and published by Tom Winkler. This game allows a single player to play as an emotionally unstable employee who is about to be

fired by his boss, find tools to torture, and ending up assassinating the boss. Though it may seem harmless and entertaining, this game raised many concerns among the players because of its brutal way to embody such violent and graphic homicide act that was said functioned to “*relieve all your tension whenever you feel angry on the job.*” Moreover, the game itself can be played free through several online game websites that also can be effortlessly accessed by young children. Although there is a newer version that is friendlier to children with cartoon effects and less violent animations, the original version is still available to access unrestrictedly.

1.1. The Influence on Others

Although a lot of video games may have caused concerns of negativity and a bad influence on their players, many of them provide positive impacts in a multitude of different aspects of life. This example could be seen from a video game named *Kind Words* (“*lo-fi chill beats to write to*”), a game designed by Ziba Scott, developed and published by Popcannibal in 2019. The game is designed to allow its player to share their thoughts and respond to other players’ thoughts through a unique social interaction. Players are provided with virtual letters which will be sent anonymously and privately to other players, which generally involve deep and private thoughts from the writers. Other players are given a choice to respond to the letter privately to do some sharing and discussion relating to the subject matter. This game also provides short paper airplane messages to be sent and read publicly by other players as well, usually contains words of affirmation, encouragements, simple greetings, and mini-rally games. This casual and constructive interaction between players develops positive receptions and acknowledgments, especially ones from players with troubling thoughts and those who are overcoming certain struggles. According to Cox, *Kind Words* is one of the emotional and thoughtful games because it is a unique example of a positive-sum game [3], which refers to a situation where a sum of gains and losses in the game is greater than zero [4]. In other words, no one wins or loses at someone’s expense. This game focused on the players’ beneficial interaction, which is showing and requesting kindness from others.

1.2. The Way Video Games Communicates

Video games speak differently from other medias to deliver a message to its players. Video games are also built by its elements and components to

construct immense experiences for the player to understand the message. Despite having a complete function of its elements and components, messages that being delivered in games are often being misunderstood by the players. The fact that games can be used as a tool to deeply interact with players to discuss certain topics and deliver certain emotions within it, we want to seek further knowledge on how GRIS, as a story-based game with a strong visual narrative, is used as an immense experience to touch its players’ emotions with its elements and components to directly build a strong bond and how its impacts for the players with similar experiences. This research is also expected to give a further knowledge and understanding the importance of game interactions with the players and how it impacts human life and well-being in the future. Furthermore, this research is conducted during COVID-19 pandemic, thus it gives a view about how games has affected the players during the pandemic, especially on habits and behaviors in digital culture.

2. FORMAL GAME ELEMENTS

GRIS is a platform-adventure game developed by a Spanish developer, Nomada Studio, and published by Devolver Digital in December 2018. The game narrates a story of a young girl, supposedly named Gris, who just had a traumatic life event and is trying to heal herself through a magical journey. Her journey is manifested in her black dress which changes over time with new abilities that will help her navigate her faded world. GRIS offers an experience with almost no text, but rich with colorful and delicate art, detailed animation, and elegant music scores. Players will explore the game with light puzzles and optional skill-based challenges that will become accessible over time and reveal the secrets of the story. This game is designed for the players to experience a personal growth journey of enduring pain, fear, and loss. GRIS is also designed based on Elizabeth Kübler-Ross’s model, 5 Stages of Grief, a model that discusses stages of those who are experiencing grief and painful events through 5 series of emotions: *denial*, *anger*, *bargaining*, *depression*, and *acceptance*. This model is represented heavily by illustrative narration in GRIS, brought to life by its colorful and beautiful experience. These strong points from GRIS become the main focus of this research, especially when it comes to immersion the player experienced during the game. Generally, immersion is understood to be the sense of “being in the game” which is also a graded experience that represents the quality of engagement between players and the game itself. The

more engagement between the player and the game, the more likely the player is to enjoy and being attached to the game. This engagement between a player and a game is constructed by game elements that hold important roles in the game. In her article, LeBlanc discussed formal game elements as the most basic elements to build a game. LeBlanc also mentioned that game designers often called them 'atoms' as these elements could be defined and studied individually [2].

2.1. Players

Games are experiences designed for their players. It is crucial to understand the involvement of players in designing a game. There are many ways to determine how many players are needed in one game. A game designed for one player is different from a game designed for two, four, or 1000 players. A game is designed for players to interact with other players and/or the game system [6]. This allows players to have chances in participating some social activities during the game in multiple player game formats.

2.2. Objectives

The objective in games is also considered as a goal that the player should achieve in the game [2]. This element is essential for giving motivations therefore the players to be more genuinely engage in the gameplay. The goal of a game can be a variation of many actions, whether it is to avoid getting captured, racing with other players, escaping or surviving a dangerous situation, exploring unknown areas, solving a problem, and many other goals [2, 6].

2.3. Procedures

Procedures in games are methods allowed by the rule of the game [6]. These methods can either be a series of specific instructions and set by game designers to establish actions and control all possible situations in the gameplay. Some theories mentioned that there are three categories of procedures: *setup/starting* (actions the player does once at the beginning of the game as an introduction), *progression of play* (actions and situations during the game), and *resolution* (the condition which causes the end of a game and how the game state determines the outcomes) [2], while another theory adds one more category, which is *special* (actions that available only when there are changes involving other elements in the game state [6].

2.4. Rules

Rules in games are also known as mechanics which build the game system and the whole gaming experience. Some rules are automatically applied in a game state without the player's interaction, while other rules are voluntarily chosen by the player and decide the effects of those choices [5]. In summary, rules in games are simply made to define objects and game conditions, restrict player's actions, and determine effects in player gaming experiences.

2.5. Resources

Resources in games are game objects or game items that bear values for players in order to reach their individual objectives [6]. The most common examples of resources are *health*, *lives* (the number of lives the players have to accomplish the goals), *currency* (items used to trade objects), *actions* (player's ability to move and take turns), *units* (players have more than one object representation at a time), *time*, *objects* and *inventory*.

2.6. Conflict

Conflicts in games are challenges that emerge when the player tries to accomplish the goals. Thus, conflicts are designed by rules and procedures to prevent players from accomplishing their goals directly. Conflicts in a game can be reached in three ways, which are *opponents* (enemies), *obstacles* (puzzles, high buildings, etc.), and *dilemmas* (choices the player has to take in order to determine a game state or situation).

2.7. Limitation

Limitations also known as boundaries or constraints, are the borders set between the game world and the real world [6]. While keeping the players being immersed in the game is one of the main goals in designing a game, it is also important for game designers to keep both game-world and real-world separate. As two players can play a competitive game with one against each other within the limitations, they can be friendly at the end of the game without any remorse. Limitations in games can be physical (e.g., the edge of a game area) or conceptual (e.g., social agreement in playing).

2.8. Game State

A game state is a conclusive outcome of the game, including the effects of the player's choices,

actions committed, items collected, and so on. A game state is usually concluded based on the measurements during the gaming experience and ended with a clear statement (winning, achievements accomplished, rankings, wealth earned, replaying the game, etc.) [6].

3. RESEARCH METHOD

GRIS is a game that rotates around a journey of healing and overcoming a traumatic event. This topic is heavily embodied in the game through its elements, representing how a depressive and traumatic experience would be seen, felt, and simplified for a better understanding of the topic. GRIS communicates with its players through visual, ambience, and auditory components with no speech and almost no text, creating a room of opportunity for the players to understand its meaning with their own interpretations, like a painting in an art gallery [7]. For some players, GRIS is a calming experience built into a visual masterpiece that is beautiful to look at, listen to, and play [7-8]. Meanwhile for some others, GRIS has given an immense meaning by portraying some of their realities and familiarities from having depressive thoughts and overcoming griefs [9-10]. To understand and explore more of these claims, the authors conducted qualitative research by interviewing 7 teenage students whom most have experienced depressive thoughts and traumatic events. The participants are students with the age range of 15 to 19 years old. The interview was conducted individually with the informal and open-ended interview format, each lasted from 10 to 20 minutes, and done through online-based video call platforms such as GoogleMeet and Zoom Meeting, considering the research took place during the COVID-19 pandemic. The authors utilized purposive sampling [11] with a phenomenological approach [12] to understand each gaming experience from different perspectives. The participants were selected to take the role of co-researcher [13] to give feedback on how gaming experiences with GRIS affecting their emotions and understanding of related issues discussed based on its visual and auditory details as

well as GRIS overall game elements. Moreover, a self-play and game analysis were carried out by the author prior to the player studies, in order to study the game elements and gameplay of GRIS. During this phase, the discussion topics for the interview were formulated. As an introduction to the research, the participants are shown trailers and screenshots from GRIS and were asked to compare it with other video games the participants usually play with concerning its genre and gameplay. In one phase, the participants were given approximately two hours to play or to finish one to two levels of GRIS. After playing, the participants were invited to start a conversation about the overall experience from a phase of play by thinking aloud, guided by key points of the topic that were formulated beforehand. The main challenge in this research is for the participants to verbalize their perceptions of the game and its relation with their personal gaming experience that affected their personal emotions. Semi-structured interviews with open-ended answers, and focused on a specific gaming experience context, was considered to be an advantageous approach due to the player's freedom to talk bluntly, but still be restricted by a specific topic [14]. The interviews conducted were also voice-recorded and taken notes of for the analysis process.

4. FINDINGS AND DISCUSSION

4.1. Observation and Analysis

Before interviews were conducted, a self-play and game analyses process was executed for the purpose of basic game element analysis in GRIS. This research focused on how game elements in GRIS were designed and built to embody 5 Stages of Grief (denial, anger, bargaining, depression, acceptance) into an immense gaming experience. The analysis was concentrated on identifying game elements used in each level and based on five stages or levels in GRIS which embodied each of 5 Grief Stages. To clarify the statement, the authors provided simplified analysis data shown in **Table 1**.

The analysis of GRIS through its game atoms as presented in **Table 1** showed that there is some significant use of game elements to describe a certain purpose in the game to build immersion and engagement with the players. Each game atom has its own role to represent a certain goal in order for the player to fully experience the game journey and tells a hidden meaning regarding to the concept of the game itself, which is a journey about depression and self-healing. For example, a player can use Gris' skill to destruct objects as a manifestation of anger and frustration that one experience during depression. Another example is shown in GRIS color restoration in the game world, from black and white to full color, as a representation of the restoration of faith and life energy in one's journey of finding the value of life after the depression is over. Many other examples are

shown with different kind of game elements that most of which is somewhat accurate according to some theories and the sufferers experiences themselves [8-10] [16-19]. Comparable to *Kind Words* that we discussed before, GRIS is another example of a positive-sum game [4] as its game states did not conclude the winner or the loser, yet it led the player to a certain message they need to interpret. As mentioned before, GRIS is claimed as an embodiment of depressive experience and visualization of a self-healing journey to overcome fear and grief. GRIS itself was straightforwardly indicating 5 Stages of Grief, a psychological theory found by Elizabeth Kübler-Ross in 1969, that explained about stages of depression and a self-healing process. According to *On Grief and Grieving* [16], these stages include:

Table 1. GRIS Game Element Analysis

Game Elements	Prologue (Denial)	Stage 2 (Anger)	Stage 3 (Bargaining)	Stage 4 (Depression)	Stage 5 (Acceptance)
Player	Gris (the protagonist)	Gris (the protagonist)	Gris (the protagonist) and tiny forest friend (NPC), giant black bird (NPC)	Gris (the protagonist), giant turtle (NPC), giant dark eel (NPC)	Gris (the protagonist), giant black bird (NPC), dark creature (NPC)
Objectives	Restore the color of red, find achievement, create a series of constellation	Restore the color of green, find achievement, create a series of constellation	Restore the color of blue, find achievement, create a series of constellation	Restore the color of yellow, find achievement, create a series of constellation	Finish the game, find achievement, complete the series of constellation
Procedure	Move to the left or right to find a giant statue	Destruct objects, transform into a solid block, explore hidden ruins	Float to reach higher grounds, feed apples to forest friend, explore the deep forest	Swim and dive fast to reach deeper water, explore hidden caves	Sing to make flowers bloom, explore an upside-down world
Rules	Find giant woman statue	Collect light orbs, gain solidify dress skill, solve the desert puzzles, destruct crying statues	Collect light orbs, gain lightweight dress skill, solve the forest puzzles, fight giant bird	Collect light orbs, gain diving dress skill, escape giant eel, solve the underwater puzzles	Collect remaining light orbs, make flowers bloom to gain boost, solve the upside-down puzzles
Resources	Normal black dress, pieces of building debris, colorless ambience	Solidified black dress skill, moving stones, ruins of temples and statues, red ambience environment	Lightweight black dress skill, half restructured temples, support butterflies, green ambience environment	Diving black dress skill, underwater temples and statues, waterfalls, deep water caves, blue ambience environment	Singing skill, upside-down ground level, fireflies, waterfalls, singing fowls, fully restored temples, full-color ambience environment
Conflict	(none)	Desert storm, moving windmill	Shape-changing trees within time, high grounds, giant black bird attacks	On-and-off cave lights, darkness, timed iced cave, cave labyrinth, giant eel attacks	Upside-down grounds, invisible stairs, broad and wide game area
Limitation	Left border of the game area, actions limited (move to left or right only)	Left and right border of the game area, solidify action added	Left and right border of the game area, floating action added	Left and right border of the game area, fast dive action added	Left and right border of the game area, singing action added
Game State	Restoration of the color red; <i>Red</i> and <i>Denial</i> achievement	Restoration of the color green; <i>Green</i> , <i>Anger</i> , <i>Sandstorm</i> , and <i>Inksuit</i> achievements	Restoration of the color blue; <i>Blue</i> , <i>Bargaining</i> , and <i>Apples</i> achievements	Restoration of the color yellow; <i>Yellow</i> , <i>Depression</i> , and <i>Eel</i> achievements	Finished game; <i>The End</i> , <i>Acceptance</i> , <i>Fowls</i> , <i>Childhood</i> , <i>Mementos</i> achievements

Denial, the first stage of grieving that often comes in the form of questioning reality. As it fades, denial will be slowly replaced with the reality of the

ourselves sometime to explore more the depth of our soul than we usually do.

Table 2. Kübler-Ross Model Embodiment in GRIS

Game Component	Association with Denial	Association with Anger	Association with Bargaining	Association with Depression	Association with Acceptance
Level	Prologue	Desert (Stage 2)	Forest (Stage 3)	Water (Stage 4)	The End (Stage 5)
Color ambience	<i>Black and white</i> is often emotionally associated with emptiness, emotionlessness, loss, and fear [17-18]	<i>Red</i> is often emotionally associated with explosive emotions and aggressive behaviors [19]	<i>Green</i> is often emotionally associated with ambivalence, doubt, coldness, and distrust [19]	<i>Blue</i> is often emotionally associated with sadness, loneliness, and isolation [18-19]	<i>Yellow</i> is often emotionally associated with warmth, life, and happiness [18-19], all colors were restored
Game resources and items	Demolished giant statue (portrayed a crumbling reality and loss),	Pillars of the ruined temple (a phase from <i>Denial</i> into <i>Anger</i>), desert storm (portrayed a mood swing)	Shape-changing trees (ambivalence and various possibilities to find a way out), black bird attack (dark emotions)	Depth of Water game area (the depth of soul in depress), giant eel attack (dark and deep emotions), underwater cave labyrinth (confusing thoughts)	All buildings and statues were nearly fully restored, the environment looked more alive with singing birds and blooming flowers
Auditory	Almost no scoring/BGM with soft notes and melody	Intense and deep scoring/BGM during the storm and statue breaking	Calming score with nature ambience (birds chirping), intense during bird attacks	Distinct and isolated-sounded, intense and rich during eel attacks, soft and thin during exploring the darkness	Lively scoring with resonant and polyphonic sound effects, frantic during dark creature attack (into the epilogue part)
Skills	None, implying the loss of will and ability to live due to a recent traumatic event	Solidify dress, an ability to destruct objects to express the anger itself	Lightweight dress, an ability to take the player to higher grounds that is impossible to do before	Fast and deep diving, implying an ability to dive a deeper soul exploring	Singing to make flowers bloom, implying that the player has found their meaning in life again and ready to move forward
Achievements	<i>Denial</i> , achieved when the player discovered the giant statue at the beginning of the game and drops onto the ground	<i>Anger</i> , achieved when the player destroyed 3 broken woman statues which look like Gris herself	<i>Bargaining</i> , achieved when the player tried to sing in front of a standing woman statue in the middle of the temple	<i>Depression</i> , achieved when the player explores a hidden cave with a giant woman statue that looked crouching its body	<i>Acceptance</i> , achieved when the player sang in front of a stone coffin and made the flowers around it bloomed
Player actions	Moving left to discover a demolished statue (denying the reality and unable to move forward)	Destroying objects around the game environment, solidified dress to protect the player from the desert storm	Interacting and helping tiny forest friend to find more apples, receiving help from it afterward	Diving deeper into the depth and darkness to explore complicated caves	Singing around the game area to make flower buds bloom, making the world alive again

loss.

Anger, the second stage of grieving that usually comes in the form of strong and explosive reactions as the result of bottled emotions such as sadness, frightened, panic, hurt, and loneliness. Anger is also considered as a form of defense system to survive other emotions that are surfacing later.

Bargaining, the third stage of grieving which comes out of feeling guilty and is followed by wondering endless possibilities as an attempt to negotiate a way out from feeling hurt. This stage could also be a stage where a person attempts to reach out to their friends, families, loved ones, even strangers to help fulfill those possibilities.

Depression, the fourth stage of grieving that often comes in the form of withdrawal from life as it becomes a self-isolation from all emotions, giving

Acceptance, the fifth stage of grieving which comes in a resolution of accepting the reality by remembering, recollecting, and reorganizing life to move forward.

GRIS game levels also echoed these five stages and associated them in five different colors. As we discussed before, game elements are the direct tools to describe these stages in GRIS and can be seen easily through its game system analysis. Aside from that, more game components in GRIS illustrated Kübler-Ross model in a more implicit approach, such as in its color association, player's actions, game resources, and other game components. Thus, the authors also analyzed and discussed how the game indeed embodied the topic is referred to, according to the theory discussed previously. The results of the analysis can be seen in **Table 2**.

The analysis shown in **Table 2** described how each stage in Five Stages of Grief was portrayed in GRIS levels through its game components. These portrayals were associated with some theories about color psychology and human emotions that triggered by visual stimulus. Each component is also a well representation on how the stages should be felt and experienced by an individual that struggles from loss and grief. To be able to discuss further understanding and to support these findings, we also interviewed a few players who has similar experience of loss and grief to share their opinions on how the game had properly represent their experience or at least had similar visualization as their experiences.

4.2. Gaming Experience

The interviews were conducted for three weeks periods of time for three groups of participants. Each week, one group consisted of 2 or 3 participants were given the freedom of completing GRIS within a week and immediately followed by an individual interview afterward. Participants were needed to explain their personal point of view on certain conditions or emotions during gameplay, specifically ones that related to game elements and relatable experience as visualized in GRIS. Each interview was recorded, written, and analyzed using the thematic analysis

[15] process in order to understand different perceptions and experiences from playing GRIS. The result of the interview analysis is shown in **Table 3**.

Although this was a preliminary study and observation, certain points are worthy of further study. Most of all players had high levels of detailed discussion referring to their gaming experiences and how it reflected their personal experiences. This finding indicated that all of the players were hugely involved in the gaming sessions and were very thorough in understanding the game from different aspects. It is also important that by discussing the game, the players also allowed themselves to be more exposed and expressed their own traumatic experiences. Moreover, it is worth noticing that although GRIS portrayed the Kübler-Ross model in a fairly general approach, the players could affiliate their gaming experience with their own stories and made the experience more personalized. As shown in **Table 3**, there was a slight struggle in understanding the Kübler-Ross model expressed in the game, perceived from different perspectives of the players. Despite presenting the game with minimal text elements, most of the players gained comprehensive conclusions concerning how the Kübler-Ross model was viewed from its overall visual and auditory elements. This also included all the game elements

Table 3. GRIS Gaming Experience Summary According to Interviews

Players (Initials)	Least Relatable Experience	Most Relatable Experience	Visual Experience	Auditory Experience	5 Stages of Grief Representation
TA	<i>Forest Stage does not represent the Bargaining Phase well as it should be represented.</i>	<i>Desert Stage is the most obvious one, considering player actions were about destructing and violence during the level</i>	<i>Visually very attractive, especially with the attention to its details for every aspect</i>	<i>Incredibly soothing on the overall gaming experience</i>	<i>Anger and Acceptance are the most noticeable for the colors they were associated with and the skills of the player.</i>
DF	<i>Almost no special emotion felt during the overall gaming experience</i>	<i>The ending had the most chilling part and was relatable due to a similar personal experience</i>	<i>Smooth animation and great color judgements</i>	<i>Caused discomfort during repeated and distinct tunes in the overall experience</i>	<i>Could not fully understand what the game represented, hard to follow with only visuals and no text</i>
EM	<i>Forest Stage as Bargaining Stage was the most confusing experience</i>	<i>Feeling similarities in Water Stage with current depression experience</i>	<i>Each emotion during the stages was well represented and almost accurately</i>	<i>Intense and fitted each scene appropriately</i>	<i>Easily-followed and touching to had experienced how it was portrayed</i>
OL	<i>Denial Stage was not properly presented</i>	<i>Feeling touched and nostalgic on overall experience due to personal ordeals</i>	<i>Resembling emotions of each stage entirely</i>	<i>Haunting and relaxing on some parts of the game</i>	<i>Acknowledged parts of its embodiment, newly discovered insights on parts of the model</i>
AG	<i>The puzzles were seen as casual and unnecessarily related to the overall concept</i>	<i>Having reflected and reminded by most of the stages, especially during Anger Stage</i>	<i>Great loss of an important person visualized deeply and almost directly</i>	<i>Emotionally reflected their personal feelings</i>	<i>Not fully understand the real storyline although the overall concept was understood</i>
HG	<i>Puzzles were complicated to solve, causing distraction from the ambience</i>	<i>The shape-changing dark creature as a depiction of conflicted human emotions</i>	<i>Caused discomfort during Water Stage, mixed feelings during other stages</i>	<i>Caused discomfort during Water Stage</i>	<i>A bit of difficulty in understanding the storyline though most of the stages were well presented</i>
MT	<i>Disagree on few parts of Bargaining and Depression Stage</i>	<i>The shape-changing dark creature as a form of depression itself</i>	<i>Great flowing animation and magical color play</i>	<i>Caused tension and immense rush during action scenes</i>	<i>Hard to understand the overall concept although the storyline was clearly presumed</i>

and how its interactions with the player during the playing. Furthermore, it is important to understand how effectively these elements brought certain emotions and reactions, such as discomforts, tensions, reminiscences, even shadows from past events. Participants were often finding difficulties in describing their opinions and thoughts due to personal trauma and other verbal issues. In order to get better feedback on game insights, the players were needed to be encouraged more to be able to express their gaming experiences with both more general and specific feedbacks.

5. CONCLUSION

In this paper, we have presented the findings of a self-play observation and interview study on the relation between GRIS game elements and how it represented the Kübler-Ross model from the participants' gaming experiences and personal perspectives. These studies provided further understanding of the depiction of loss and grief stages presented in modern media to bring awareness to the community. Despite having similarities and accuracies in the sense of emotions involved, they also provided answers on how the Kübler-Ross model was seen and experienced in GRIS in different ways from one individual to another. Furthermore, this study also verified that despite the outcomes from self-play and observation that showed rich portrayals of the Kübler-Ross model and a self-healing journey, GRIS needs more support to exceed the representation of the related topic. This collaborative study with participants, who were suffering from depression, taking roles as GRIS players was proved to be fruitful and needed for further and more detailed future studies.

AUTHORS' CONTRIBUTIONS

All authors conceived and designed the research study. Anindhita Ayesha Sandra conducted the observation, interviews, data analysing, and wrote the paper. All authors contributed to the manuscript revisions. All authors approved the final version of the manuscript and agree to be held accountable for the content therein.

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