"An Experience That Could Not be Found Anywhere Else": Resonance as an Explanatory Concept for Player Experience Research and Game Design

Jaakko Väkevä
Aalto University
Espoo, Finland
jaakko.vakeva@aalto.fi

Jan B. Vornhagen
Aalto University
Espoo, Finland
jan.vornhagen@aalto.fi

Heidi Rautalahti
Aalto University
Espoo, Finland
heidi.rautalahti@gmail.com

Janne Lindqvist
Aalto University
Espoo, Finland
janne.lindqvist@aalto.fi

Abstract

One central goal of game designers is to make games that resonate with players. Yet, within HCI games research, *resonance* is used vaguely as an everyday notion. In this work, we draw on psychological research on resonance to conduct a qualitative survey (n = 110) to explore how players characterize game experiences that resonated with them, to deliminate what resonance means for players and the interactive medium of games. Our findings illustrate how resonance captures the feeling of gameplay encounters that go on to have profound and long-lasting emotional and cognitive impacts. Our findings outline resonance as an underlying experiential quality relevant to various existing PX conceptualizations, such as eudaimonia, meaningfulness, reflection, emotional challenge, game feel, and perspective or behavioral change. Based on our findings, we outline resonance as a useful explanatory concept for what makes videogame experiences emotional, meaningful, moving, and even transformative experiences.

CCS Concepts

• **Human-centered computing → Empirical studies in HCI**.

Keywords

player experience, resonance, eudaimonia, eudaimonic gameplay, meaning, emotion, thematic analysis

1 Introduction

The idea that a game *resonates*, that is, somehow lingers [80] or 'sticks' [84] with players, has been considered a crucial quality for games that seek to instill reflection and impact players' real-life attitudes and behaviors. This has been argued both for entertainment games with recreational purposes [84] as well as for serious games with persuasive aims [80]. Indeed, researchers have made

occasional, albeit usually brief references to some sort of "resonance" when it comes to player experiences related to, for example, reflection and meaning-making associated with perspective change [106, 137, 139], emotionally challenging or impactful encounters [11, 15, 17, 29], and games' capacity to provide support during difficult life experiences [67, 86, 137].

Hence, resonance connects to the ideas of *eudaimonic* gameplay—which has received increased attention among researchers in recent years [31, 35, 36, 41]—and *meaning*—which is a central Player Experience facet that has been characterized as "a sense of connecting with the game, *resonating* with what is important" [2, p. 5, emphasis added]. Within HCI games research, however, resonance has so far been generally invoked as a loosely defined, everyday notion. Yet, resonance could pose a useful explanatory concept for HCI games research, where deeper engagement with psychological theory has been repeatedly called for [6, 131, 134]. Particularly in relation to experiences of resonance and meaning [63, 83, 112], establishing a well-defined theoretical concept that can explain and predict such player experiences could help synthesize past descriptive work, guide future research, and inform game design.

In the context of information science, Ruthven [112] recently conceptualized resonance as the experience of *relevance*, providing descriptions of the experience and its potential facilitating mechanics and preconditions. If applicable to videogame experiences, resonance—connected to both the subjective experience of *meaning* [63] and *relevance* [112]—could therefore help understand the *feeling* of gameplay encounters that can give rise to profound and lasting impacts beyond play, and explain why some meaningful game experiences result in long-lasting impacts on players, even shaping behaviors, perspectives, or identities, while others do not.

In this work, we take a first step to explore how players experience and make sense of the notion of resonance in games, and whether resonance [63, 83, 112] could serve as a useful explanatory concept going further, both for better understanding the impacts of games and for designing more impactful games. To do this, we conducted a qualitative online survey [23] with 110 participants, who were asked to recall and describe "a videogame experience which you felt to really resonate with you." The survey included a series of open-ended questions seeking to capture how players implicitly understood the notion of resonance, what games resonated with players and how, and how factors like specific game design elements or the players' personal backgrounds might have played into these resonating game experiences. We analyzed the data using reflexive thematic analysis [19, 20], to develop themes depicting how players experience resonance, and to derive explicit,

actionable insights for both researchers and game designers. The contributions of our work are threefold:

(1) We provide empirical evidence of the different kinds of game experiences that players themselves understand as resonating with them. Moreover, our findings illuminate ways in which feelings of resonance could be conveyed not only through games' narrative elements but also through interactions with gameplay mechanics.

(2) We present resonance as an explanatory concept for player experience research, helping capture the feeling of gameplay encounters that can lead to long-lived emotional and cognitive impacts. Resonance, as our findings show, is an interactive and relational experience marked by the player's emotional and personal connections with a game, which can leave an enduring sense of being affected and transpire to various real-life outcomes beyond gameplay. We outline how our findings align with previous theoretical conceptualizations of resonance from psychology [63, 83] and information science [112], providing conceptual clarity as to what it means that a game resonates with its player.

(3) Based on our findings, we derive concrete implications for game designers and researchers. Particularly, we discuss how resonance connects to a range of prior player experience research relating to, e.g., eudaimonia [31, 36, 41, 99], meaningfulness [90, 106], reflection [84], emotional impact [15, 16, 29, 39], game feel [11, 98], aesthetic and art experiences [17, 137], empowerment [135], perspective transformation [138, 139], and coping [51, 67, 86, 136]. Taken together, our findings underscore how the explanatory concept of resonance can illuminate how and why some game experiences can stick with players as highly memorable, exceptional, and deeply cherished experiences that go on to influence players' lives in profoundly positive ways.

2 Related Work

2.1 Games and Resonance

Resonance seems to be an important factor for emotionally impactful videogame experiences. In a study on art experiences in videogames, the notion of *emotional resonance* was used to characterize how "participants emphasized the emotional impact of their experience, describing how it resonated for hours and days after playing" [17, p.237:9]. In another study on emotionally moving moments in games, attachment to game characters was reported as a "source of emotional resonance" [15, p.6]. Along the same lines, in a study on *game feel* and emotionally impactful game experiences, it was reported how encounters where the players' emotional experience aligns with that of the avatar or the game situation could lead to "emotional resonance, a state in which the emotional impact of the game scene is heightened" [11, p.7]. Hence, in prior literature, notions of resonance have been linked to particularly salient emotional responses to gameplay, relating, e.g., to players' attachment with game characters. However, in all of the above-mentioned studies, the term emotional resonance is only mentioned peripherally.

In addition to emotional experiences, resonance seems to connect to how games can lead players to *reflect* [84, 137, 139]. A previous

study on perspective challenging game experiences reported how one trigger for prompting reflection could be *biographic resonance*: i.e., experiences where the game somehow aligns with the player's own experiences [139]. Similarly, in a study of how players narrated meaningful encounters with videogames, resonance was related to *embodied reflective encounters*: i.e., cases where "something that had happened to the players themselves suddenly *resonated* with the game experience, or the game offered a wholly new self-discovery of values and attitudes" [106, p.11, emphasis added].

Moreover, notions of resonance have been linked to games' capacity to help players cope with difficult life experiences [see 67, 86, 106, 120, 136], particularly, by facilitating personal meaning-making [86]. In this sense, resonance seems closely connected to *eudaimonic* gameplay [35]. However, while eudaimonic gameplay experiences are often associated with players' cognitive and emotional engagement with games' narrative elements, much less has been said about how more hands-on interactions could contribute to such experiences [35]. Notably, a recent study revealed how *Dark Souls* [57] might help players cope with depression, showing how the game's bleak and challenging nature could resonate with players' personal experiences with depression or existential crises [136]. While not characterized in terms of resonance, *Spiritfarer* [130] was described somewhat similarly as a game that could mirror players' personal experiences of loss and provide them support in the process of bereavement [50, 51].

In the context of persuasive games, resonance has been deemed a particularly desirable feature [80]. That is, in order for persuasive technologies to fulfill their purpose of encouraging reflection and behavioral change, it has been argued that it is necessary for the experience to "linger or *resonate* post-encounter for users/players" [80, p.122, emphasis added]. In turn, resonance has been associated, e.g., with games' capacity to facilitate learning [72]. Notions of emotional resonance have been connected to educative games that seek to cultivate empathic understanding of others' experiences, e.g., with depression, by conveying associated feelings through gameplay and interaction [97]. In the somewhat broad context of *transformational games*—e.g., educational games, serious games, games for health, training simulators, empathy games, and behavior change games—which aim to produce specific changes in users, designing for *psychological resonance* has been proposed as a way of prompting intrinsically motivated and personalized experiences of transformation [111, p.3].

Despite the importance of resonance for both entertainment and persuasive games, there is a lack of conceptual clarity as to how exactly these scattered notions of resonance connect, and how players *themselves* make sense of and characterize resonating experiences in games. Although HCI games researchers have oftentimes invoked notions of resonance, usage of the term has remained superficial, leaving a general vagueness as to what exactly is meant by a game resonating with a player. Moreover, like with some other terms commonly used to depict player experience (e.g., *empowerment* [135]), resonance seems to have been primarily attributed by the researchers. Therefore, it remains unclear whether resonance is a descriptor commonly used by research participants, i.e., by players themselves.

Consequently, we currently face two issues: First, it is unclear what kind of experiences actually resonate with players and why.

Second, the divergent and unspecified usage of the term resonance leaves it unclear what researchers mean when they use the term resonance. This thwarts both consistent description of the phenomenon of resonance in games and subsequently focusing research efforts and deriving effective design recommendations [see 134].

To address this, we follow calls in HCI games research for more theory use [e.g., 6, 131, 134]. Following prior work that has highlighted the benefit of behavioral theories for HCI in linking descriptive research and design practice [8], we will next introduce previous theoretical conceptualizations of "resonance" [63, 83, 112], which we link to existing HCI games research.

2.2 Resonance as the Experience of Relevance

In information science, resonance has been proposed as an explanatory concept depicting what it means to experience *relevance* [112]. This understanding was based on an interdisciplinary review of how resonance has been used to denote human experiences, which revealed that the term is commonly used vaguely without specific definition, although it can refer to a multitude of phenomena [112]. Based on this interdisciplinary analysis, resonance was outlined as spectrum of experiences with a variety of possible cognitive, affective, and visceral outcomes, ranging from a sense of harmony or coherence to life transformations [112]. Within this spectrum, Ruthven [112] defined resonance broadly as:

> "An experience brought about by an interaction with another object that is based on cognitive and/or emotional alignment with that object, one that amplifies our existing values, beliefs, desires and results in some kind of change from simple recognition of similarity, through absorbing, possibly harmonious, experiences, to behavioral change." [112, p.562-563].

Particularly, Ruthven [112] identified three experiential regions of resonance: *agreement*, *arousal*, and *action*. Resonance was connected to situations where the assessment of the relevance of some information is not strictly intellectual—or, based on some somewhat objective relevance criteria (e.g., finding the most competitive mortgage)—but which involve more subjective, emotional or aesthetic components [112]. Situations in which subjective and nonintellectual criteria can play a major role in our relevance assessments and decision-making can include, e.g., leisure activities, such as our searches for music, art, or fiction to engage with [112].

2.3 Resonance, Meaning, and Eudaimonia

In psychology, resonance has been used to denote the subjective experience of meaning, or, as Huta [63] described:

> "I believe one of the best words to characterize what meaning feels like is *resonance*. It is that feeling of really clicking with something, having a special fit or connection…as if your link with an experience or activity has an echo, a second dimension that makes it more vibrant and real (subjectively and truly, I believe)" [63, p.21-22].

In turn, the experience of meaning is seen as an aspect of the higher-order concept of well-being [63, 64]. In psychological research, well-being is often viewed through the two concepts of

hedonia and *eudaimonia* [37, 64, 65]. Hedonia is typically associated with the presence of feelings like pleasure, enjoyment, and fun, and the absence of feelings like pain and discomfort—whereas eudaimonia is related to notions like authenticity, autonomy, virtue, growth, self-actualization, and meaning [65]. Hence, eudaimonia is related to well-being that is connected to meaning and meaningful experiences, which can comprise variables like value, broad implications, moral elevation, awe, inspiration, connection with a greater whole, integrity, and self-connectedness [63].

Topics like meaning and eudaimonia have also gained increased attention within HCI [82, 83]. In their study, Mekler and Hornbæk [83] presented a framework for the experience of meaning in HCI, based on a synthesis of psychological meaning research. The framework outlined five components of meaning, one of which is *resonance* [83]. Here, similar to the definition of Huta [63], resonance denoted the immediate experience of something making sense, without a need to reflect on it: "We might have an intuition, a positive 'gut feeling', that what we are doing and experiencing right now is 'right'." [83, p.6].

The meaning framework was illustrated with an analysis of how meaning has been discussed in CHI papers, highlighting a need for more examples and narratives of concrete meaning-making processes and sources of meaning [83]. Moreover, it was suggested that resonance has received far less attention compared to the other components of meaning, and, particularly, that past CHI papers may have overemphasized the role of reflection for the experience of meaning, possibly overlooking the role of "the intuitive and unreflected experience of resonance" [83, p.9].

2.4 Research Aim

Scattered notions of resonance have been invoked in HCI games research in various contexts broadly relating to eudaimonic gameplay. Indeed, resonance—and the adjacent concepts of meaning [63, 83] and relevance [112]—have been recognized as generally important facets of gameplay: The Player Experience Inventory (PXI) understands *meaning* as one of the psychosocial consequences of play, defining meaning as "a sense of connecting with the game, resonating with what is important" [2, p.5], with one item of the scale being "*The game felt relevant to me*" [2, p.9].

Resonance is commonly invoked in a vague, everyday sense, yet it can encompass a spectrum of experiences varying in intensity and depth [112]. If some experiences of resonance are more powerful than others—and some games more capable of evoking resonance than others—then understanding why could offer novel ways of describing, assessing, and designing for player experiences in which resonance is a prioritized quality. Consequently, in the present study, we examine resonance [63, 83, 112] as an explanatory concept, by analyzing players' personal narratives of game experiences that had resonated with. Here, we sought to determine what is it that makes certain game experiences resonating, how these qualities align with previous conceptualizations of resonance, and how resonance could inform future player experience research and game design. This line of inquiry could (1) deepen our understanding of how games can enrich players' lives and facilitate meaning-making processes, e.g., by helping players cope with difficult life events [67, 86, 120, 136]; (2) inform persuasive games or

technologies for various prosocial purposes [80], including mental health support [28, 53, 77] or education [72, 97]; and (3) help further leverage the eudaimonic capacities of games to better cater to players' motives beyond mere fun and pleasure [101].

3 Method

For our study, we conducted a qualitative online survey [23] in which we asked participants to recall and describe a videogame experience which they felt to have resonated with them.

3.1 Study Procedure

The online survey was conducted using Webropol[1]. A link to the anonymous online survey was distributed to various gaming-related online communities (Discord & Reddit) as well as to various online channels (e.g., Telegram) of our local university. Our aim was to recruit from communities with people who actively play videogames. We sought to encompass a wide range of player experiences related to resonance, hence we recruited from communities related to gaming in a general sense (e.g., *r/gamers*) rather than communities dedicated to specific games. We explicitly chose to recruit volunteers over paid participants as (a) people are often eager to share their gaming experiences [33], and (b) we wanted to increase our chances to get participants who recount genuine accounts of personal experiences over participants who may simply give socially desirable answers to get paid.

The survey link was distributed and open from the 27th of June to the 30th of July 2025. The survey and all communities we recruited from can be found in our OSF repository[2].

3.1.1 Qualitative Survey. We conducted a qualitative survey to explore the phenomenon from a *wide-angle lens* [23]. Qualitative surveys have been seen as a valuable method for capturing a diversity of perspectives, experiences, or sense-making, particularly when it comes to researching under-explored areas [23].

Our survey comprised four general demographic questions, five contextualizing gaming-related demographic and behavioral questions, and 11 open-ended topic-based questions, aligning with typical examples of qualitative surveys [23]. Prior to launch, the survey design was piloted on two test participants to ensure that the questions felt intuitively understandable.

Participants were first asked to give their informed consent to partake in the study and to have their anonymized data shared, and to confirm they were at least 18 years of age. Only if participants provided full affirmation to the previous points, the survey continued and participants were asked optional demographic questions (using multiple selection checkboxes for gender [117]).

Next, we then prompted participants to bring to mind a videogame experience that had resonated with them. We asked participants to use their own understanding of the word "resonate", and encouraged them to use the words and language that feels natural to them. We furthermore asked participants to avoid using generative AI (e.g., ChatGPT) to generate or edit their answers. After three participants had filled in the survey, we added a reminder

that participants should not be worried about including spoilers of the game in their responses.

We then asked participants to describe the experience, in as much detail as possible. We asked for the title of the videogame in question, and how long ago did the experience take place, before participants had to elaborate on why had experience resonated with them personally.

These mandatory questions were then followed by several optional questions about the experience. The full questionnaire can be found in the repository.

3.2 Reflexive Thematic Analysis

Each participant's response was then formatted as an individual PDF file—to retain the overall context of each answer—which were then imported to Atlas.ti [62] for a reflexive thematic analysis [20, 22]. The analysis was conducted by the first author, following the six-phase approach by Braun and Clarke [20]. We adopted a reflexive approach to thematic analysis due to its suitability for exploring participants' subjective experiences and sense-making [19]. The thematic analysis was conducted from a contextualist paradigm [18], attending to participants' own descriptions of their lived experiences, while also emphasizing the interpretive role of the researcher in making sense of these descriptions. The analysis thus focused on both semantic and latent meaning within the data, intending to produce themes, or, interpretive, *meaning-united stories* that cut across the dataset and capture some important aspect of the phenomenon under investigation [22]. While the analysis was inductive in nature, it was invariably shaped by the first author's background as both as an avid player and a researcher of games. However, in accordance with our reflexive approach to thematic analysis, rather than conceptualizing these subjective perspectives as *biases* [20], we viewed them as fostering nuanced and reflexive interpretation of the participants' self-described experiences [91].

First, to prepare for the analytic process [21] the first author closely read through the entire dataset while recording informal memos. For the first coding stage, the first and second author both inductively coded a small subset of the responses (10%), after which they converged to discuss their impressions and interpretations. We did not seek to establish inter-rater reliability, since we conceptualized codes as a process rather than the outcome of our analysis [81] and the purpose of this collaboration was rather to stimulate reflexivity and explore multiple assumptions or interpretations of the data [24]. Next, through iterative refinement of coding and re-reading of the data, the first author generated initial themes. After further iteration and discussions between the authors, potential themes were further developed. Finally, after refining and naming the themes, we arrived at four themes, which we report in section 4.

3.3 About Our Sample

A descriptive analysis of our sample (see Figure 1) was done in RStudio 2024.12.1 [110], using R 4.5.1 [104] and the packages tidyverse 2.0.0 [140], maps 3.4.3 [9], patchwork 1.3.0 [95], readxl 1.4.5 [141], and RColorBrewer 1.1-3 [88]. All data and descriptive analysis can be found in the repository.

1091 people opened the survey link, 352 began filling it in. Of these, 110 participants fully completed and submitted the survey,

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[1]webropol.co.uk
[2]https://osf.io/n5c9t/overview?view_only=058f925ff45a4020bc967d18dff5c944

which has been seen to represent the *upper end* [23] when it comes to sample sizes in qualitative surveys. The average response time was 40 minutes, with a median of approximately 26 minutes.

3.3.1 Demographics of our sample. Eighty five participants were men, 15 were women, and five were non-binary. In addition, four participants preferred not to disclose their gender and one preferred to (only) self-describe. The most common age group was between 25 and 34 years old (43.6%) and no participant was older than 54. The most common countries of residence were the US (34.5%), Finland (10.9%), Germany (9.1%), Canada (8.2%) and the UK (5.4%). Furthermore, most participants reported being employed (61.8%), with the remaining being students (25.5%), unemployed (9.1%), or choosing not to answer the question (3.6%).

3.3.2 Gaming habits of participants and mentioned games. Participants had played videogames on average for 24 years (Min: 3 | Max: 44) and they played on average for 18 hours a week (Min: 1 | Max: 80). On average, participants rated their videogame experience as 8.86 out of 10 and broadness of taste as 7 out of 10. The most frequently mentioned game was *Outer Wilds* [42] (nine mentions), followed by *Clair Obscur: Expedition 33* [68], *Disco Elysium* [143], and *Persona 5* [92, 93] (each with three mentions). Notably, the vast majority of described experiences were single player, with only a few responses relating to multiplayer experiences. A table of most mentioned games can be found in the Appendix (see Table A1), and a full list can be found in the repository.

For the most part, the resonating experiences had occurred between 2 and 10 years ago (n = 46). 26 experiences had occurred between 1 and 2 years ago, 21 experiences over 10 years ago, 6 experiences between 2 and 11 months ago, and 11 experiences less than 2 months ago.

4 Results

Based on our findings, resonance can be understood as an experience in which a game fosters a close emotional or personal connection with its player, evoking salient and memorable emotional responses, leaving a lingering experiential echo that can transpire to reflective meaning-making processes and profound real-life outcomes beyond gameplay. Hence, resonance is about players' interaction and *relationality* with the game: about how something in the game is subjectively felt, in an emotionally evocative manner, to meaningfully address some relevant aspects in the players' own lives, such as their sense of identity, beliefs, feelings, concerns, or past experiences.

In this section, we report our findings in the form of four themes, which depict distinct facets of our participants' resonating game experiences. The four themes were defined, in short[3], as: (1) *Resonance as Emotional Investment*; (2) *Resonance as Personal Connection*; (3) *Sparking Real-Life Outcomes*; (4) *Resonance as Interaction*.

Please note that due to the complex and multifaceted nature of these player experiences, although each theme is presented separately, they are deeply intertwined and could often overlap. The reported themes are structured around headers that illustrate different aspects within these themes, often representing individual codes from the initial analysis. These subsection headers serve the

purpose of narrating the reader through our themes while illuminating some of the interpretive, analytic work that went into their development. Respectively, the themes are illustrated with participant quotes[4]. However, again, due to the deeply interwoven nature of the themes, individual quotes and individual codes could span multiple themes.

4.1 Theme 1: Resonance as Emotional Impact – Profound Emotional Responses, Experiences that Stick

This theme focuses on the *emotional* facets of resonance, particularly, how players associated their resonating game experiences with a diverse range of powerful and memorable emotional responses. One participant described how they interpreted resonance as implying an emotional reaction (P92, *Alien: Isolation* [5]). Participants commonly related their emotional responses to the game's storytelling and characters. Generally, the emotional qualities of the reported game experiences seemed have had left vivid imprints on the participants' minds. For example, P110 wrote of *Pokémon Violet* [55]:

> "It's not like the game was exceptional or even that challenging, but the emotional aspects and story narrative are what really made this experience resonate with me. I have played other games, but I still remember how this felt while playing." (P110, *Pokémon Violet* [55])

4.1.1 Memorable experiences, feelings that stick. Notably, the vast majority of the reported game experiences had occurred more than a year ago, with some participants explicitly mentioning how the emotions or feelings they had felt during gameplay had stuck with them afterwards. The reported game experiences generally appeared to have been highly memorable and often emotionally evocative even in retrospect. For instance, P22 wrote of *Portal 2* [132]:

> "I should mention that this was probably over 10 years ago and I've yet to find anything like this in the gaming scene. Surely there must be some nostalgia involved, but that doesn't discredit the fact that as I just watched a clip of the ending scene to refresh my memory, I immediately got goosebumps." (P22, *Portal 2* [132])

Particularly, participants commonly described how the game's music had left a powerful emotional impression. For instance, P87 wrote of *Signalis* [109]: "[The game] resonated with me so much, that even now, when I listen to the song "Die Toteninsel" from the game's soundtrack, I still feel those emotions stir within me."

4.1.2 Moments of epiphany, something that clicks. Participants also often mentioned feelings of insight, epiphany, or realization, with a couple explicitly mentioning how something in the game had clicked with them. For instance, P40 wrote of *Touhou 10: Mountain of Faith* [4]: "Immediately the music clicked with me". In turn, P84 wrote about *Outer Wilds* [42]:

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[3]A summary of the four themes can be found in the Appendix (see Table B1).

[4]All participant quotes are reported verbatim, including any typos or grammatical errors. In some quotes, we have used brackets to insert (1) contextualizing words or (2) ellipses ([…]) to show that words have been omitted for brevity.
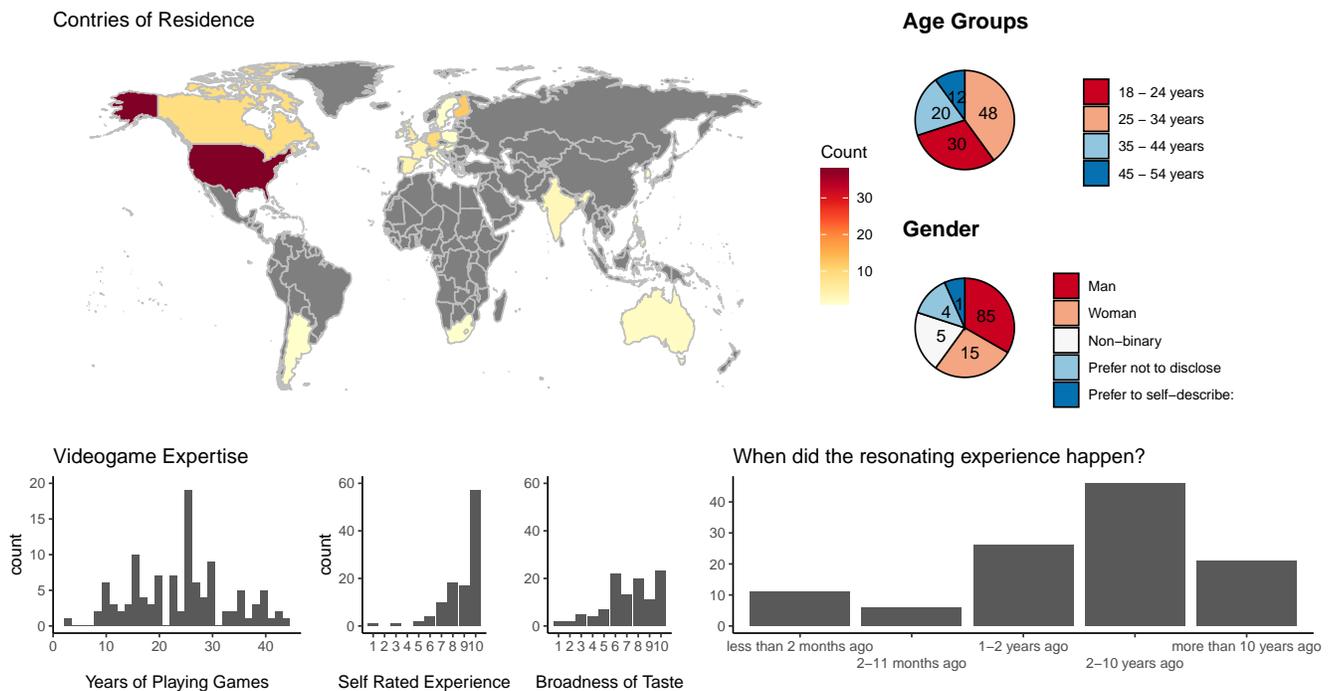
Figure 1: A combination plot of the demographics of our sample, including country of residence, age groups, gender, participants videogame expertise, and how long ago their described experience took place.

"The moment which truly resonated with me was when the pieces of the puzzle clicked together and I realised what had to be done next". (P84, *Outer Wilds* [42])

4.1.3 A blend of feelings–sadness, joy, fear, nostalgia, bittersweetness, wonder, awe, crying, catharsis. ... In general, participants associated their game experiences with a wide range of positively and negatively valenced emotions. "It was a true blend of feelings", P10 wrote of *Clair Obscur Expedition 33* [68]. Participants often narrated emotional trajectories, for instance, P5 related to *Outer Wilds* [42]: "Shock, followed by horror, followed by mild disbelief, followed by immense sadness, then a growing sense of bittersweet acceptance." When asked about what emotions the game had evoked, P26 wrote:

> "All of them. Frustration, joy, hate, love, sadness, elation, confusion, revelation... This game made me bring everything I had physically, emotionally, and mentally. It resonated with me in ways no games have since, let alone hitting all of them at once." (P26, *Demon's Souls* [56])

A couple associated the game's emotional impact with physical qualities, for instance, describing the experience as "visceral" (P16, *Final Fantasy VII* [122]; P25, *Dragon's Dogma* [26]). In turn, P40 wrote of *Touhou 10: Mountain of Faith* [4]: "I could physically feel myself flying through the air dodging the bullets."

Notably, a commonly reported experience among participants was how the game had made them cry, which, some described, was rare to them. In one instance, a participant reported feeling "a

sadness subdued by confusion" during the ending of *Signalis* [109], and breaking out in crying only afterwards when thinking about the game; "For some reason, laying in bed and crying for two hours straight was a wonderful experience, a catharsis unlike any other I had experience before", P87 wrote.

4.1.4 Ineffable emotional experiences, feelings of emptiness. Sometimes participants could not exactly articulate their emotions. For instance, P70 described of the ending of *Outer Wilds* [42]: "I can't express it in words, it's emotional, I am tearing up as I remember that moment." Similarly, describing the emotions evoked by *Mad Rat Dead* [116], P20 wrote: "[I felt] a very strange sense of something-or-other that I cannot exactly put into words."

Some characterized feelings of emptiness that followed after finishing the game. For instance, P86 reported in relation to *Outer Wilds* [42]: "Shortly afterwards there was an empty feeling, that it would be impossible to find anything that could compare." Similarly, P106 wrote about *The Stanley Parable* [25]: "I felt empty when I finished the game, that's how you know it was good."

4.1.5 Moments that stop you, feelings that require processing. Several participants described how something in the game had touched them so that they had to pause and take in the experience. For instance, related to a plot twist in *OneShot* [75], P64 wrote: "I had to stop playing the game at this point. I had to go stand by the window and reflect on my behavior and decisions." Similarly, P52 described facing an emotionally challenging in-game decision in *Persona 5 Royal* [93]: "This moment stopped me cold. I actually set

down the controller and just... sat there." In turn, P62 described of *What Remains of Edith Finch* [61]):

> "I'm not sure how to describe it. Once I finished the game, I just had to sit there and process it... in the dark. I've heard others have felt similarly. I wasn't sad or crying, but it just touched me in a place I never expected a game to touch me." (P62, *What Remains of Edith Finch* [61])

4.2 Theme 2: Resonance as Personal Connection – Mirroring Life Experiences, Being 'Seen' by the Game

This theme focuses on the *personal connections* that participants associated with resonance, or, how they commonly drew parallels between their game experiences and the real world. Here, players' personal backgrounds and life contexts were often seen to blend into their gameplay experiences, amplifying the game's impact.

4.2.1 Mirroring life experiences, personal struggles and existential fears. Participants commonly described how the game somehow mirrored their own life experiences, often related to some issues that players were struggling with in their life at the time. For example, P52 wrote of *Persona 5 Royal* [93] "The experience resonated with me because it mirrored real, unresolved questions I've struggled with in my own life about the role of pain, the limits of empathy, and whether it's better to be safe and content or free and uncertain."

Some connected the game to their mental health challenges. For instance, P72 wrote of *Celeste* [78]: "My own struggles with my mental health mirrored the main characters own struggles." Several also mentioned their own experiences of loss. In turn, P110, having had recently lost a dog, wrote of a scene in *Pokémon Violet* [55]: "I could really feel the character's pain since I had gone through a similar situation recently." Similarly, P62 reflected *What Remains of Edith Finch* [61] and loss: "I think the game resonates more with people who have experienced death in their lives, myself included.... I think the game touches on something felt by people who lose close family members."

Oftentimes, participants also related their game experiences to their personal existential concerns. For example, P70 wrote in relation to *Outer Wilds* [42]: "The theme of fear of unknown, death and acceptance, and regret and attachment, it connected with me, it reminded me of myself." In turn, P67 recounted a powerful experience with *Night in the Woods* [113] after having recently undergone a major life event.

> "My experience with being raised religious, then leaving said religion and subsequently discovering absurdism following a period of existential crisis set me up to relate to the existential themes of Night in the Woods, specifically the character journey that the main character goes through." (P67, *Night in the Woods* [113])

4.2.2 Touching on universal human experiences. Sometimes, participants described the game as having touched on some universally relatable aspects of the human condition. For instance, P42 characterized the protagonist's character arc in *Disco Elysium* [143] as "a human story that we can all relate to, serving as a powerful metaphor for life." In turn, P71 wrote of *Final Fantasy IX* [123]: "It was beautiful, human, and touched on the loneliness of being a person lost in a vast universe as... I think we all pretty much are."

4.2.3 Seeing one's self in the game – questions of gender, sexuality, and identity. Participants frequently reported 'seeing' themselves in the game, or, conversely, having been 'seen' by the game. For instance, P67 wrote of the main character in *Night in the Woods* [113]: "She has struggles that I can relate to deeply personal experiences in my own life. I see myself in Mae." In one particularly powerful example, P9 described a scene in *The Cosmic Wheel Sisterhood* [38], where the protagonist encounters a character who is a closeted trans woman and a computer science student:

> "At this point I was already sobbing- I until very recently was a closeted trans woman, working away at my computer science degree, until I finally had to confront my feelings along and decide for myself who I was. There was an indescribable feeling of "I am seen" with the character- and especially in the game which is a huge allegory for a shared bond of "Sisterhood" between all women, it left me speechless. As a trans woman, I've always felt like I am and will always be an outsider to the group "women", but to see the character be treated so equally and with open arms by the protagonist- it left me sobbing for hours." (P9, *The Cosmic Wheel Sisterhood* [38])

Several others also related their game experiences to some ongoing discoveries of gender, sexuality, or other aspects of identity. For instance, P87 wrote of *Signalis* [109]: "My own queerness and my search for identity/meaning I was going through at the time heavily affected my emotional resonance to the game and allowed me to experience it in a much more intimate way." In another example, P20 described playing *Mad Rat Dead* [116] on Nintendo Switch using split Joy-Cons—i.e., holding a motion sensitive controller in both hands—and being prompted with an in-game instruction: "I am a furry, so I see 'hold your paws to your chest', think, oh yeah I can literally hold my paws to my chest, and this kind of breaks something in my self-image."

4.2.4 Recognizing one's own flaws. Some participants reported how the game had rather helped them recognize some undesirable personality traits in themselves. For example, P105—who reported having had been "terrible at actually working hard at anything" at the time—wrote of playing the notoriously challenging *Dark Souls* [57]: "It felt like the game was directly talking to myself[…] it directly addressed my personal flaw." In turn, P18 recounted playing *The World Ends With You* [124] and relating to its main character Neku, an antisocial teenager:

> "I was deeply unhappy and had no friends, and (unintentionally) pushed people away because I didn't trust them after I was hurt by a former friend, and I was convinced I didn't need friends. So I found early-game Neku very relatable... which I quickly realized was a problem, due to how the other characters reacted to Neku." (P18, *The World Ends With You* [124])

4.3 Theme 3: Sparking Real-Life Outcomes – Continued Engagement, Inspiration, Reflection, and Transformation

This theme focuses on the *real-life outcomes* that participants related to resonance, depicting how the impact of their game experiences could extend well beyond the gameplay context. Participants routinely reported having had continued to engage with the game—e.g., through social sharing, online community engagement, consuming or creating game-related content, listening to soundtrack, or replaying—often commenting how they had grown more attached toward the game over time. However, participants frequently related their game experiences also to more concrete and personally significant outcomes in their own lives.

4.3.1 Igniting personal transformative journeys. A few participants narrated how a personally relatable character arc in the game had actually ignited a personal process of working toward addressing their own flaws and becoming a better person. For instance, P18, continued writing of *The World Ends With You* [124]:

> "Through the events of the game, Neku eventually learns to trust other people and make friends, even taking a huge leap of faith at the very end of the game where he puts his life on the line. This started a series of events where I started to want to try to figure out why I was so unhappy and learn how to trust people and have friends, like Neku did. I've made a huge amount of progress the past few years and learned a lot about myself, and while I still don't have any friends, I'm at least actively trying to meet people now." (P18, *The World Ends With You* [124])

In turn, P32 described a coin puzzle in *Silent Hill 2 (Remake)* [127], where the correct answer is based on the player's own interpretation, P32 described having selected an answer that ultimately results in the main character dying of suicide:

> "I wasn't happy with that ending, but as I sat there listening to the credits thinking about what I had seen, I realized that it was my own choice. Not just in the game, I realized that I had this tendency to blame things on myself that I wasn't guilty of... the ending made me realize that the guilt was unjustified and would lead me on the same path eventually. The moment really resonated with me in an interesting way, as I began to consider the entire game from that lens. Considering what different decisions I could have made both in the game and in my own life helped me understand my own flaws as a person and change them." (P32, *Silent Hill 2 (Remake)* [127])

Hence, in these cases, the participants' resonating game encounters had transpired into very concrete real-life experiences of personal development.

4.3.2 Fostering self-understanding and self-acceptance. In addition to seeing aspects of their selves in the game, participants often reported that the game had actually helped them become more in tune with, accepting of, or compassionate towards themselves. For instance, relating to the in-game instruction to "hold your paws to

your chest" in *Mad Rat Dead* [116], P20 described: "Maybe I felt a bit more comfortable with myself and happy to exist in the world afterwards." In turn, playing *The Cosmic Wheel Sisterhood* [38] as a trans woman, P9 reported: "I felt unbelievably loved and welcomed-never before have I had a character whom I was able to channel myself into before." Notably, P99 wrote of the social deduction game *Town of Salem* [14]: "[It] lead me to investigate the possibility that I was autistic. It helped me practice social communication skills (as much as video games can) and got me connected to the professional help I needed."

4.3.3 Helping cope with difficult experiences. Several participants recounted how the games had provided concrete support during times of personal difficulties. For instance, dealing with the loss of a grandparent, at the time, P98 characterized *Spiritfarer* [130] as "masterclass in handling grief and losing a loved one." In another case, having played *Outer Wilds* [42] while going through a breakup, P70 wrote: "The game taught me to work on present, as past is past, and no one knows of the future." In turn, related to *Sekiro: Shadows Die Twice* [58], P61 wrote: "While facing domestic abuse, playing the game helped me reclaim a sense of control."

4.3.4 Fostering empowerment and inspiration in daily life. Sometimes participants described how the game experiences had empowered them to feel more driven or capable in their everyday lives, even spurring drastic life decisions, such as pursuing a doctoral degree. For example, P105 wrote of *Dark Souls* [57]: "I became more driven, more resilient, able to deal with stress and frustration." In turn, P90 reflected:

> "Zelda inspired me to do my best at everything I set my mind to, talk to everyone that I encounter because they all have something to offer, and to appreciate the small slice of life stuff like helping a neighbor who lost their dog, or whose chickens got loose. It inspired me to pursue a PhD." (P90, *The Legend of Zelda: Ocarina of Time* [46])

4.3.5 Something to live by – alleviating existential dread and instilling hopefulness. In addition to mirroring their personal experiences, several participants characterized how the game had shaped their overall perspective towards life, e.g., by helping alleviate their own existential fears. For instance, P28 recounted themes of morality and mortality in *Cyberpunk 2077* [27]: "Something to reflect on as a lens for how I should live my live and then die, when the time comes." Again, related the perceived existential themes of *Night in the Woods* [113], P67 recounted: "That climactic scene never fails to make me cry, the words of Mae's speech are ones that I live by."

Others described how the game had left them with a more hopeful or positive outlook on life. For instance, P42 wrote of *Disco Elysium* [143]: "I genuinely believe the game helped me reflect on various aspects of my life and instilled in me a sense of optimism about the future." In turn, P71 reflected on some personal existential struggles and a scene in *Final Fantasy IX* [123] where two characters are struggling to communicate with one another: "Better to try to enjoy yourself than to drive yourself crazy trying to find answers to questions you can't even form, no?"

4.3.6 Lingering reflections, actively thinking about the game after gameplay. In addition to lasting emotional impressions (see 4.1.1), participants frequently associated their game experiences with cognitive engagement that persisted outside of gameplay, with participants often describing how something in the game had left them actively thinking about the game even long after they had finished it. For instance, P79 wrote of *Soma* [60]: "I spent a week afterwards pondering about existance itself, and what makes us, us." In turn, having played *Clair Obscure: Expedition 33* [68] only recently, P10 wrote related to its ending: "I have been reflecting on that moment for weeks now. Truly incredible."

Notably, some participants noted how they could not immediately grasp the experience. For instance, P87 described *Signalis* [109] as a game that "is not immediately understandable and only unravels its full beauty after one has thought about it for a long time." Again, related to *Signalis* [109], P74 wrote: "I read The King in Yellow, a book mentioned in the game, to try to better understand it. I spent days theorizing on my own about the complexities of the plot. The game will remain with me for life."In turn, P2 described both *Hotline Miami* [59] and its sequel, and, wrote, presumably about the first game: "It didn't [resonate] at first. I found the game nice and entertaining, but i just couldn't understand it much."; P2 continued:

> "Yet i stayed in the community, watching videos on youtube, maybe browsing on the game's subreddit, and then i understood the game and it didn't leave me ever again. I played it a couple more times and I still think about it to this day." (P2, *Hotline Miami* [59] & *Hotline Miami 2: Wrong Number) [40]*)

4.4 Theme 4: Resonance as Interaction – Uniquely impactful, 'game-y' experiences

This theme focuses on the *interactive* qualitites of participants' resonating game experiences, e.g., how resonance was seen to be conveyed through interactive gameplay mechanics. Notably, players frequently reported that their game experiences had felt in some way "unique" in comparison to their previous experiences with games or with other media, implying some vague experiential quality that seemed to relate to a degree of how 'game-y' the experience had been.

4.4.1 Thematically congruent gameplay. Several participants described how the certain gameplay mechanics had in some way aligned with and amplified the game's narrative themes. For instance, writing of *Signalis*, P87 characterized how the game's survival horror mechanics-emphasized the game's themes related to "the fear of death or the anxious search for one's own identity and meaning"—yet peaceful sections in between "showed that there was also hope and tranquility to be found somewhere" In turn, related to themes of grief and death in *Outer Wilds* [42], P70 reflected: "The game is a loop, you will die to a supernova every 22mins,and you can't do anything about it, it's the world ending, this mechanic plays the important part of this game's theme which inturn helped me emotionally." Reflecting on *Spiritfarer* [130] and its message about dealing with loss, P98 wrote: "[The game] managed to rather seamlessly prove its point via gameplay mechanics."

4.4.2 Storytelling through interaction. Participants sometimes described how the game had explicitly used gameplay mechanics as a form of storytelling. For instance, P29 recounted an awe-inducing moment in *Final Fantasy III* [121] where, reaching the end of game's map, rather than simply warping back to the other side of the map—as in the previous games—the player is instead transitioned to another, larger map; "This simple trick -- hiding the scale of the map behind player assumptions -- manages to make the experience of seeing the wider world feel accurate to the experience of the characters in the game", P29 wrote. A somewhat similar example was reported in *Final Fantasy VII* [122] by P16, who, playing as Cloud, described fighting alongside the antagonist Sephiroth in a flashback sequence:

> "We're told of Sephiroth, but in that fight, Cloud does meaningless damage to the enemy while Sephiroth destroys the monster in a single attack dealing the damage cap. This was something I had not experienced in a game before, to fight alongside the antagonist and to experience his power." (P29, *Final Fantasy VII* [122])

At times, it was rather that interaction *was* storytelling in the game. For example, P39 wrote of both *Florence* and *What Remains of Edith Finch* [61]: "Acting out what the character experiences let me emphasize with them… interaction was telling the story." Similarly, participants described how exploration served as the key storytelling device in *Outer Wilds* [42], *Subnautica* [47], and *The Stanley Parable* [25]. Relating to *Outer Wilds* [42], P58 wrote: "I was enamored by the play-loop of this game[…] The only thing that changes is your perception of the events around you."

In another case, P9 described a fortune-telling scene in *The Cosmic Wheel Sisterhood* [38], where the player has to create custom Tarot cards:

> "When prophesizing the future of the trans woman witch, it made an immediate emotional impact when the two cards I had made for growth and hope were drawn. Then, the game allows you to interpret them with some variation, and the option of the trans woman witch being destined to be accepted by all completely broke me and left me unbelievably loved and hopeful for the future." (P9, *The Cosmic Wheel Sisterhood* [38])

4.4.3 Moments of quiet, taking a break from action. Sometimes resonance could be conveyed instead by the lack of interaction, or, with the game affording the player a moment of quiet to pause and reflect on their experience and feelings. For instance, P42 recounted crying during *Disco Elysium* [143] : "[The characters] are taking a small boat to a neighbouring island, and there is a cut scene where the music is evocative and makes you reflect on the journey you've been on so far." In turn, P62 reflected on the self-paced nature of *What Remains of Edith Finch* [61]: "You are able to do things at your own pace and absorb things as you will. I've always disliked games with timed or time-limited mechanics." In turn, In turn, P3 recounted a striking realization about the time loop gameplay mechanic of *Outer Wilds* [42] and how the game is "about coming to terms with the inevitable":

"I spent the entirety of the next loop not trying to solve puzzles and piece together clues, but just sitting in a beautiful spot on my home planet, alone with my thoughts, and waiting to watch the world end one more time." (P3, *Outer Wilds* [42])

4.4.4 Internalizing a message. Some participants described how their game experiences had made them somehow internalize themes or ideas that they were already familiar with. These responses often implied a sense of being invested in the game's story and gameplay. For instance, P24 described a scene in the campaign of *Battlefield 1* [44]: "I've always had strong compassion for the young men that fought in ww1 on both sides, then to play through that game a get to that part of the story just hit home how fucked up of a war it was." In these cases, *something* about engaging with these ideas in the form of a game had seemed to influence participants' views on the topics. For instance, related to themes of consciousness in *Soma*: "I've read stories with similar plots, but putting this into a video game makes you internalize the experience much more so." In another example, in *Detroit: Become Human* [43], where the player leads a rebellion of androids to secure their rights as a sentient species, P68 described deciding to pursue a peaceful demonstration, which resulted in a futile outcome:

"The struggle made me feel that so many struggles are hopeless without violent resistance which made me question long held beliefs in non-violence. It made me more fearful for the world but also let me internalize that large scale societal change has never occurred without suffering." (P68, *Detroit: Become Human* [43])

4.4.5 'More than a game', profound art experiences. Several participants hailed the games as beautiful works of art. For instance, P5 wrote of *Journey* [129]: "I still view it as a true art piece/experience more than just a game." In turn, P4 described in relation to *Metal Gear Solid 5: The Phantom Pain* [103]: "Games can be truly something more than just entertainment, but something deeper, artwork that provokes introspection and processing emotions." Notably, P87 reflected on *Signalis* [109]:

"I do think that without these feelings of personal resonance, I would have still thought the game was a grand work of art, but through them, I managed to experience what I now considered the single piece of art that has moved me the most in my entire life and that I would consider the most beautiful work of art I have ever allowed my spirit to lay grasp upon." (P87, *Signalis* [109])

4.4.6 Uniquely impactful, unprecedented media experiences. Several participants reported how there was something uniquely impactful about their game experience that had made it stand out from their previous experiences with games or with other media. For instance, P88 wrote of *Outer Wilds* [42]: "It felt like the first game I'd ever played that fully understood what people love about games." These unprecedented experiences could, for instance, relate to subversion of players' expectations, as P94 wrote of *Outer Wilds* [42]: "It felt from such a wide departure from "solving" things you usually do in video games. And it forced me to reevaluate some things in life as well. Sometimes its ok to not have answers." Such

subversion of expectations could also relate to metafictional elements in the game; for instance, P64 described a "once-in-a-lifetime experience" with *OneShot* [75], recounting a scene that seemed to blur the boundary between reality and fiction: "For the briefest of moments, I wondered if what I was doing by playing the game was moral[…] No other game has ever made me feel this way."

These uniquely impactful experiences could relate to the deeply intimate connection that players had with game. For instance, P67 reflected on *Night in the Woods* [113]: "Seeing a fictional character go through something that I can relate to on a deeply personal level, portrayed in a way that feels authentic and nuanced in a way that I've never seen in another piece of media." In turn, related to a specific in-game decision, one participant described:

"Persona 5 Royal didn't just entertain me; it made me confront what I believe about happiness, agency, and the cost of emotional safety. That moment was powerful because it respected me as a player. It didn't tell me what to choose; it asked me to define my values. And that, to me, is what makes storytelling in games uniquely impactful." (P52, *Persona 5 Royal* [93])

Notably, as a contrasting example of a profound yet seemingly not very interactive gameplay encouter, P77 described experiencing "the most heart wrenching musical number in any piece of media" in *Kentucky Route Zero* [32]: "These scenes are not particularly game-y, so I feel a bit strange choosing them (they might work just as well in a movie)."

4.5 Summary of our Findings: "An Experience That Could Not be Found Anywhere Else"

Taken together, these four interwoven themes depict resonance a spectrum of game experience with qualitatively distinct components, which, in their boundaries can be overlapping and fuzzy. These qualitatively distinct components of resonating game experiences were: (1) deepened emotional impact, (2) personal connections, (3) real-life outcomes, and (4) uniquely 'game-y', interactive qualities. The prevalence of each component could vary from experience to experience: i.e., some participants clearly characterized more powerful emotional responses than others; some experiences had involved more intimate personal connections with the game than others; and some experiences had lead to more concrete and significant real-life outcomes. Moreover, experiences could also vary within the fourth—arguably the most elusive—component related to interactivity: i.e., some participants described their game experience as something that no other media could replicate, while others reflected how they might have had a similar experience with, say, a movie.

Notably, many of the particularly profound and personally significant experiences were ones where the game appeared to have had strongly resonated with the player *across* each of these four experiential dimensions. One participant, P16, provided an unprompted personal definition of resonating game experiences: "Games that stick with me long after I'm done with them, make me think about them, and make me feel something inspiring that I can take with me into other experiences in life." Continuing to describe one such experience with *Final Fantasy VII* [122], P16 wrote:

"The game was unlike anything else, that showed how a game could transcend its interactive mechanics to tell a story unlike anything else and leave you with an experience that could not be found anywhere else. It made me think about life in a completely unique way, in the way that books can do, but with so much more immersion than a book could ever do because of how many senses a game encompasses. I was living with those characters, experiencing their struggle, their triumphs, their losses, all in a way no other media could ever do." (P16, *Final Fantasy VII* [122])

In summary, resonance can be viewed as a spectrum of experience, where, through their interaction, the player connects with something in the game on an emotional and personal level. This experience can leave players with a long-lived sense of being affected, and lead to reflective meaning-making processes that may carry profound real-life implications beyond play.

5 Discussion

The notion of *resonance* has been connected to how players experience meaning in games [2, p.5], yet there is a lack of conceptual clarity surrounding the term. Inspired by prior theoretical conceptualizations of resonance [63, 83, 112], we asked 110 participants to describe a game experience that had resonated with them. Through our reflexive thematic analysis, we developed four themes that depict distinct yet interconnected components cutting across these resonating game experiences, comprising a spectrum through which the experience of resonance in games could be understood. We discuss how our findings align with previous theoretical conceptualizations of resonance and outline how establishing resonance as an explanatory concept could inform future player experience research. We also discuss the limitations of our work, and highlight how our findings could inform game design.

5.1 Resonance as a Spectrum of Emotional, Self-Relevant, and Inspiring Player Experiences

5.1.1 Evoking strong feelings, lasting emotional connection. Our participants related resonance to a rich spectrum of complex, mixed-affect emotional responses (see 4.1.3), which have been of general interest in player experience research [e.g., 15, 16, 29, 31, 39, 137]. Particularly, the reported resonating game experiences generally aligned with the idea of *eudaimonic* gameplay [31], often involving responses such as reflection, meaningfulness, awe, appreciation, or nostalgia [see 36]. Some participants also associated resonance with visceral emotional qualities (see 4.1.3) or the distinct *feeling* of a gameplay interaction even after years had passed (see 4.1). Hence, in addition to engagement with games' narratives, resonance could also relate to the *game feel* [see 11, 98] of participants' emotionally impactful gameplay interactions. Overall, these emotional facets of resonating game experience broadly align with what previous conceptualizations of resonance have depicted as the region *arousal*, which includes descriptors such as *deeper feelings and emotions* and *lasting appeal and emotional connection* [112, p.560]. Our findings suggest the concept of resonance could be key in explaining why

some players form such profound and enduring emotional bonds with certain games.

5.1.2 Activated memories, felt similarity, connection to the real world. Our findings also link resonance to the personal connections that players draw between the game and their own lives (see 4.2). Here, our findings align with prior notions of *biographical resonance* [139], *personal relevance* [137], and *self-relatedness* [31] which have been associated with games' capacity to prompt eudaimonic experiences that are meaningful, reflective, and possibly perspective widening. Particularly, our participants tended to connect their game experiences to some, at the time, unresolved issues in their own lives, e.g., related to questions of identity or existential challenges (see 4.2.1). Here, our findings aligned with prior literature on how games can mirror players' lived experiences and support players in coping with or re-framing their personal struggles [67, 86, 106, 120, 136]. Notably, our participants made overt references to recently studied phenomena related to *Spiritfarer* [130] and loss [50, 51] (P98) and how *Dark Souls* [57] has been associated with fostering resilience or helping cope with depression [136] (P61 & P105). Here, our participants' resonating game experiences in general corresponded to the region of *agreement* in previous conceptualizations of resonance, which includes descriptors like *activated memories* and *"felt" similarity with someone* [112, p. 558]. We suggest that this personal component of resonance could be key in explaining what it is that can *ignite* various personally significant and self-expansive, eudaimonic experiences [31, 137, 139] or meaning-making processes through which players find support amid difficult life situations [50, 67, 86, 136].

5.1.3 Enduring engagement, lasting sense of being affected, transformation. Our findings illustrate how resonance could extend beyond gameplay, and how participants' resonating game experiences were often associated with various *eudaimonic effects* [41]: i.e., they were attributed to various positive real-life outcomes in players' lives (see 4.3). As such, the reported resonating game experiences encompassed aspects of various recently researched phenomena, e.g., how games can foster self-understanding and identity formation [105, 106] or perspective transformation [137–139], empower players to deal with personal issues [135] or help cope with difficult life events [50, 67, 86, 136]. Our participants routinely reported having continued to engage with the game in various ways outside gameplay (see 4.1), supporting previous suggestions about how such post-play re-engagement (e.g., online forum activity) could serve as an important process for players to make sense of their game experiences [105, 136, 137]. Here, our participants' accounts generally aligned with what has been previously conceptualized as the *action* region of resonance, including descriptors like *growth and change in understanding*, *lasting sense of being affected*, and *transformation* [112, p.561]. While a previous study found that recruiting players to talk about "*gaming moments that have changed you*" elicited scarce response [31, p.6], our findings suggest that resonance could pose an intuitive term for invoking players to share eudaimonic gaming encounters associated with transformative qualities. Hence, the explanatory concept of resonance could also inform a range of persuasive technologies that aim to instill enduring changes in users' attitudes, perspectives, or behaviors [80],

e.g., serious games seeking to support education [72, 97] or positive mental health outcomes [53, 79].

5.1.4 *'Game-y' aesthetic experiences, interactive vulnerability, games as a unique art form.*

Our findings connected resonance to the interactive nature of games (see 4.4), particularly, how the resonating experiences were often described as qualitatively unique, or as somehow standing out from participants' previous encounters with games or other media (see 4.4.6). This aligns with the prior idea of *interactive vulnerability*, proposing that "a strong emotional experience is *more likely* in videogames than in other media, and will feel more unique and personal" [31, p. 9]. Somewhat similar notions of personal investment and self-reflexive engagement have been associated with game's capacity to elicit deeply moving, transformative aesthetic experiences [137]. Our participants often related their experiences to notions like profoundness, often appreciating the game as a beautiful work of art (see 4.4.5). As such, these resonating game experiences were seen to encompass a range of what have previously been denoted as *art experiences* [17] or *aesthetic experiences* [137]. Prior conceptualizations of resonance have not particularly addressed such interactive qualities of the experience, apart from mentioning "interaction itself [as] a classic sign of resonance" [112, p.562]. Yet, we propose that this interactive dimension of resonance could be key for understanding what it is that makes some experiences with games feel exceptionally powerful and impactful to players (see 4.4.6). It has recently been asked whether there is a need to separate eudaimonic gaming experiences from eudaimonic experiences with other media [99]. Our findings provide support to the idea that some of the eudaimonic experiences afforded by games can be unique to the medium [99], and we suggest that this interactive component of resonance could help conceptualize the unique experiential affordances of games.

5.2 Resonance and the Components of Meaning

In alignment with Huta's characterization of resonance as the subjective feeling of meaning [63], a couple of players explicitly described how something in the game had clicked with them (see 4.1.2). Further, Huta associated this feeling of 'clicking' with an experiential *echo* and *vibrance* [63, p.22], closely resembling, for instance, how one participant characterized an experience that had occurred more than 10 years go: "It has stuck with me how human, vibrant, and engaging the experiences within the game were" (P16, *Final Fantasy VII* [122]). Generally, participants frequently provided detailed accounts of specific moments in gameplay—often invoking particularly evocative language such being "touched", "moved", or "struck"—implying that something in the gameplay had immediately impacted them deeply. However, given that our data comprised participants' retrospective, remembered accounts of gameplay experiences, it is naturally difficult to make accurate observations about the *de facto* immediate aspects of these lived experiences—a generally recognized challenge in player experience research [137, 139]. Still, these were game experiences that had left players with exceptionally vivid, emotional impressions: for instance, one player reported not even remembering what exactly had happened in the game but that "the feeling somehow stuck" (P45, *Grand Theft Auto IV* [89]).

However, in their responses, participants could often shift between different temporal framings when describing their game experiences. Responses commonly included broader reflections about the game experience as well as about the players' own lives. When using the word *meaning*, players often referred to their sense that in-game actions carried real consequences within the game world, relating to the concept of *agency* in games [30]. Yet, at other times, participants described their own general struggles with finding meaning in life, or, referred to the existential struggles of the games' characters (see 4.2). Hence, these accounts often encompassed aspects of the more reflective components of meaning experiences: i.e., *purpose, coherence, significance* [83]. For example, some players described having grappled with questions of purpose in their own life, how the game was then felt as depicting these existential struggles in some coherent way, and how the game experience was now evaluated as having had some enduring sense of value and importance. In turn, the more overarching component of *connectedness* [83]—i.e., that the experience of meaning connects beyond the immediate experience [74]—was generally implied by the participants' capacity to recount these past gameplay experiences and attribute them with some personal relevance (see 4.2). Hence, although writing about resonance, our participants often implicitly referred to other experiential components of meaning, highlighting the fuzzy and interconnected nature of these components [83].

Notably, we found that some players related their resonating game experiences to inexpressible feelings that apparently demanded no further articulation (see 4.1.4), while others recounted moments that had compelled them to pause and process the experience (see 4.1.5), and some even reported having had spent days afterwards actively reflecting on and trying to make sense of their experience with the game (see 4.3.6).

While it is suggested that a disrupted sense of coherence, e.g., when an experience clashes with one's beliefs or previous experiences, could motivate sense-making endeavors, the framework for the experience of meaning [83] does not fully explain the process of how an initially ungraspable experience may go on to develop into more a coherent sense of meaning and significance (such as P2 in the case of *Hotline Miami* [59]; see 4.3.6). That is, if resonance is viewed as something making sense immediately—and coherence is viewed as the outcome of a reflective meaning-making process—what is it exactly that drives people to engage with or reflect on experiences that do not make sense in the first place? In previous research on players' sense-making, regarding human-nature relationships, Spors et al. [118, 119] invoked the notion of *sensitisation*—or, "an experiential process of becoming destabilised and troubled to reconfigure [one]self and [one's] place within nature on a relational and phenomenologically-situated level" [118, p.12]—to refer to how players' sense of relationality with nature in games can shape their perception of real-life nature.

Similarly, in our study, our participants often actively related their game experiences to their unresolved issues in their own lives, such as questions of self-identity, purpose, or philosophical beliefs. Hence, our findings suggest that, *as understood by players themselves*, resonance does not always remain an intuitive sense of something 'clicking' in the moment, but it can also include a disrupting sense of something of personal significance 'sticking', or lingering with the player, acting as an evocative experiential

precursor that motivates subsequent reflection, meaning-making efforts, and perspective or behavioral change.

5.3 Limitations and Future Directions

First, it should be highlighted that our sample mostly consistent of men from Western countries, who were experienced players of videogames with versatile tastes in gaming and already engaged in online gaming communities (see Fig. 1). This—as well as the exploratory nature of our study—limits the kinds of perspectives that were reported and their generalizability to broader populations of players. Moreover, our study was done in English, where "resonance" can be used to describe a range of experiences–similarly as to the word "meaning", which can refer to a multitude of phenomena [74]. When translated to other languages, resonance may carry different connotations and meanings [112].

Our findings illustrate resonance as an evocative, subjectively felt experience where the player closely connects with something in the game on an intimate and emotional level. This experience can be highly individualized and dependent on the player's life context and cultural and socio-technical background. Indeed, Ruthven's framework poses that one of the preconditions of resonance is that a message is culturally appropriate or accessible [112]. Still, previous conceptualizations of resonance seem to assume that people should somewhat broadly possess the general capacity for experiencing a subjective feeling of emotional or cognitive alignment [112] or special connection [63] with *something*, even if this something may vary from situation to situation and from person to person. Given the relative homogeneity of our participants, future work should further explore what kinds of experiences and games do players from different and more diverse cultural and socio-technical backgrounds find resonating, and how usage of the notion may vary across communities and contexts.

Second, while we see it prudent to assume that resonance may be a widespread experience for players, it is unclear how common such gaming experiences are. Although some participants reported being able to think of several resonating game experiences, some mentioned how only one game experience clearly stood out from the rest. Consequently, future work could study how common resonating game experiences are within players.

Lastly, we highlight that the focus of our study was on the subjective qualities of players' *experience* of resonance, rather than how different game design elements caused these experiences. Future work could investigate in more detail what kinds of games or game design elements are effective at facilitating experiences of resonance. Still, our study yielded rich accounts of players' resonating game experiences which provide various concrete pointers towards how designers could approach resonance.

Further work on games and resonance could draw on sociology, where resonance has been used to characterize one's *relationship* to the world, formed through affect, emotion, intrinsic interest, and feeling of self-efficacy [107, 108]. Although it remained outside the scope of present work, *affective interaction*, which prioritizes the situated interpretation of affective experiences [3], could pose another useful perspective for further approaching how games, or technology systems resonate with and influence peoples' lives.

Future work could also further explore the connection between nostalgia and resonance. The majority of the reported game experiences dated back to multiple years ago (see Figure 1), and in their responses, participants often mentioned bittersweet, past-oriented emotions like nostalgia [see 114]—which have previously been connected to the self-oriented, existential, and social functions of entertainment experiences [142] and to eudaimonic gameplay [35, 36, 100].

However, it generally remains unclear whether nostalgia should be viewed as an outcome of resonating experiences, or, for example, as a pathway to resonance, a co-occurring phenomenon, or a reflection of retrospective reporting and post-hoc meaning-making, or perhaps, to some extent, all of the above.

5.4 Designing for Resonance

In this section, we provide suggestions as to how designers of games, or perhaps interactive technologies more broadly, could facilitate experiences of resonance. Our findings outline resonance as an interactive and relational experience, marked by an emotionally evocative, personal connection with something in the game, which may spark subsequent meaning-making processes and transformative outcomes. Hence, designing for resonance should be of particular interest to those concerned with prompting *reflection* in users—a topic that has been of notable interest within HCI [7, 10, 52, 115], particularly in the context of games and play [66, 71, 84, 85].

Create inactive moments that allow space for reflection, introspection, and processing of one's experience. In relation to their resonating game experiences, several participants described how something in the game had touched them to the extent that they had to pause or take a break from gameplay, to process their experience (see 4.1.5). In some cases, the game itself afforded participants moments of quiet and reflection (see 4.4.3). Hence, when designing for resonance, we propose that designers could deliberately craft moments of inaction that allow the player to take in their experience. This aligns with previous suggestions about how an absence of complex gameplay mechanics could give room for more emotional and reflective responses [34, 39], and how acts of waiting in a game can afford players opportunities for introspection [128].

Align interactive mechanics with the intended emotional impact. Although they can sometimes be treated as such, emotional impact and complex gameplay mechanics need not always be mutually exclusive [29, 96], and more nuanced exploration of the interplay between gameplay and emotionally impactful experiences has been called for [39]. Based on our findings, resonance could be a useful concept for explaining and fostering such interplay. For example, our findings illustrate how games can employ interaction as a form of resonating storytelling (see 4.4.2) or how aligning gameplay mechanics with narrative themes could amplify the game's emotional impact (see 4.4.1).

Encourage proactive exploration and interpretation. As a particular successful design example of a resonating game, our findings underscore *Outer Wilds* [42], by far the most frequently mentioned game by our participants with nine mentions. Participants highlighted how the storytelling of *Outer Wilds* [42] occurs primarily through the player's own exploration and interpretation of the game world, and, for example, how the game's time loop

mechanic played into the game's existential themes. Previously, *Outer Wilds* [42] has been discussed as a successful design example of a *mystery* game [73], highlighting how forming and sustaining interpretations about the game world acts as the principal *doing* in the gameplay experience. Our findings further support previous design guidelines for engaging mystery game experiences [73]—e.g., leaving room for ambiguity and multiple interpretations and providing players tools for managing their interpretations—could also be helpful for fostering experiences of resonance, such as epiphanic moments where something 'clicks' with the player (see 4.1.2). This aligns with previous suggestions about designers may use ambiguity to allow players to form a more personal emotional connection with a game [39].

Help players insert personal meanings into the game. Participants often described how they had connected the game to some aspects of their own lives, and designers of resonant experiences should consider how to foster such personal connections. For instance, *The Cosmic Wheel Sisterhood* allows the player to create their own Tarot cards and then interpret them (see 4.4.2), and *Silent Hill 2 (Remake)* lets the player interpret the 'right' solution to its coin puzzle (see 4.3.1). Our participants also mentioned ethically ambiguous in-game decisions that made them confront their own values (see 4.4.6), aligning with previous research on how morally or emotionally challenging in-game choices may contribute to meaningful experiences [30, 70, 139]. Personal connections could also be fostered through the use of metaphor. For example, the in-game phrase "Don't go hollow" from *Dark Souls* [57] was recited by one of our participants (P105) as symbolizing the importance of resilience in life; previous research on *Dark Souls* [57] showed how players commonly interpreted the game's idea of *hollowing* as a metaphor for depression or existential crises, finding similar themes of resilience from the game [136], suggesting that the in-game concept holds a somewhat broadly relatable symbolic appeal to many. As such, our findings align with the principles of *existential, transformative game design* [111], which have proposed metaphor—or, connecting something abstract into something that has a reference to the real world—as a tool for fostering psychological resonance [111]. Indeed, the use of metaphor or *sticky messages* are also echoed in the Resonance Spectrum framework [112], which we point to for further ideas about how resonance might be facilitated across different experiential levels.

Consider the specificity of your target audience: are you seeking to convey a more individualized or universally relatable experience? Some of the reported game experiences were highly individualized and deeply rooted in the player's personal background, to the extent that participants described 'seeing' themselves in the game and its characters (e.g., P9 with *The Cosmic Wheel Sisterhood* [38]; see 4.2.3). In contrast, in some cases the game was seen to touch upon some more generally relatable aspects of the human condition (see 4.2.2). Perhaps one reason why *Outer Wilds* [42] had resonated so broadly with participants pertained to the ways in which the game addresses universally relatable existential themes like the transience of life and accepting the inevitability of death.

Utilize the emotional power of music and audio. Interestingly, participants routinely underscored how the game's *music* had left a particularly vivid emotional impression (e.g., P87 with *Signalis* [109]; see 4.1.1, and P77 with *Kentucky Route Zero* [32]; see

4.4.6). Some participants also highlighted voice acting, such as P57 with *Clair Obscur: Expedition 33* [68] and P89 with *Blacktail* [94]. Thus, our findings suggest that audio, and more specifically music may be a game component that merits particular attention for designers and researchers interested in resonating experiences.

Purposefully establish and then subvert expectations. In relation to their resonating experiences, participants sometimes described how the game had subverted their expectations, for example, via metafictional storytelling (e.g., P64 with *Oneshot* [75]; see 4.4.6). Self-referential moments, where games highlight their own role as games, have previously been associated with with reflective and transformative game experiences [137–139]. Notably, some participants reflected on how their own expertise with the medium of videogames contributed to the subversion of their expectations: That is, one must have first established expectations for them to be subverted. For instance, related to the mind-blowing realization about the largeness of the game world of *Final Fantasy III* [121] (see 4.4.2), P29 noted: "The reason it was so monumental was because I had previously played the first two Final Fantasy games." Hence, as one way of designing for resonating interactions, we propose deliberate establishment and subsequent subversion of player expectations as a means to convey narrative themes or amplify their impact—whether it be building upon previously established conventions within a specific series or genre of games, or operating within a more confined context of an individual game.

6 Conclusions

In conclusion, we propose the concept of resonance as a tool to study and design for meaning-making processes that are rooted in players' personal and emotional connections with their game experience. Resonating game experiences can range from emotionally engaging gameplay moments or felt similarity with something in the game, to profoundly evocative and deeply personal encounters made possible by the unique interactive qualities of the medium. These experiences can transpire to reflective meaning-making processes, and leave players with an enduring sense of being affected, even shaping their identities and how they see themselves and the world. Our findings offer clarity as to what it means that a game resonates with a player, by outlining four qualitatively distinct experiential components (see 4.5) that form a spectrum through which the player experience of resonance can be conceptualized and designed for.

Acknowledgments

References

[1] Square Product Development Division 1. 2001. *Final Fantasy X.* https://store.steampowered.com/agecheck/app/359870/ Published: Game [Windows, PlayStation 2, PlayStation 3, PlayStation Vita, PlayStation 4, Xbox One, Nintendo Switch].
[2] Vero Vanden Abeele, Katta Spiel, Lennart Nacke, Daniel Johnson, and Kathrin Gerling. 2020. Development and validation of the player experience inventory: A scale to measure player experiences at the level of functional and psychosocial

consequences. *International Journal of Human-Computer Studies* 135 (March 2020), 102370. doi:10.1016/j.ijhcs.2019.102370

[3] Naseem Ahmadpour, Danielle Lottridge, Jonas Fritsch, Corina Sas, Marta E. Cecchinato, Daniel Harrison, Kristina Höök, Pin Sym Foong, Kiran Ijaz, Phillip Gough, Yidan Cao, Xuefei Li, Shaimaa Lazem, and Thida Sachathep. 2025. Affective interaction and affective computing - past, present and future. In *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*. ACM, Yokohama Japan, 1–6. doi:10.1145/3706599.3706743

[4] Team Shanghai Alice. 2007. *Mountain of Faith.* http://www16.big.or.jp/~zun/html/th10top.html Published: Game [Windows].

[5] Creative Assembly. 2014. *Alien: Isolation.* http://www.alienisolation.com/ Published: Game [Windows, iOS, Linux, PlayStation 3, PlayStation 4, Xbox 360, Xbox One, Nintendo Switch, Android, OSX].

[6] Nick Ballou. 2023. A Manifesto for More Productive Psychological Games Research. *Games: Research and Practice* 1, 1 (March 2023), 1–26. doi:10.1145/3582929

[7] Eric P.S. Baumer, Vera Khovanskaya, Mark Matthews, Lindsay Reynolds, Victoria Schwanda Sosik, and Geri Gay. 2014. Reviewing reflection: on the use of reflection in interactive system design. In *Proceedings of the 2014 conference on Designing interactive systems*. ACM, Vancouver BC Canada, 93–102. doi:10.1145/2598510.2598598

[8] Michel Beaudouin-Lafon, Susanne Bødker, and Wendy E. Mackay. 2021. Generative Theories of Interaction. *ACM Transactions on Computer-Human Interaction* 28, 6 (Dec. 2021), 1–54. doi:10.1145/3468505 Number: 6.

[9] Richard A. Becker, Allan R. Wilks, Ray Brownrigg, Thomas P. Minka, and Alex Deckmyn. 2025. *maps: Draw Geographical Maps.* CRAN. doi:10.32614/CRAN.package.maps R package version 3.4.3.

[10] Marit Bentvelzen, Paweł W. Woźniak, Pia S.F. Herbes, Evropi Stefanidi, and Jasmin Niess. 2022. Revisiting Reflection in HCI: Four Design Resources for Technologies that Support Reflection. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies* 6, 1 (March 2022), 1–27. doi:10.1145/3517233

[11] Prabhav Bhatnagar, Markus Laattala, Supriya Dutta, Tom Cole, and Perttu Hämäläinen. 2025. Beyond Satisfaction: Game Feel Design for Emotionally Impactful Experiences. In *Proceedings of the 20th International Conference on the Foundations of Digital Games (FDG '25)*. Association for Computing Machinery, New York, NY, USA, Article 18, 17 pages. doi:10.1145/3723498.3723808

[12] BioWare. 2007. *Mass Effect.* https://web.archive.org/web/20091227203417/http://masseffect.bioware.com/me1 Published: Game [PlayStation 3, Xbox 360, Windows].

[13] BioWare. 2010. *Mass Effect 2.* https://web.archive.org/web/20111012120958/http://masseffect.bioware.com/me2/ Published: Game [PlayStation 3, Xbox 360, Windows].

[14] Digital Bandidos BlankMediaGames. 2014. *Town of Salem.* https://www.townofsalem.io/ Published: Game [Windows, macOS, iOS, Android].

[15] Julia Ayumi Bopp, Elisa D. Mekler, and Klaus Opwis. 2016. Negative emotion, positive experience? Emotionally moving moments in digital games. *Conference on Human Factors in Computing Systems - Proceedings* 2016-May (2016), 2996–3006. doi:10.1145/2858036.2858227 ISBN: 9781450333627.

[16] Julia Ayumi Bopp, Klaus Opwis, and Elisa D. Mekler. 2018. "An Odd Kind of Pleasure": Differentiating Emotional Challenge in Digital Games. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18)*. Association for Computing Machinery, New York, NY, USA, 1–12. doi:10.1145/3173574.3173615 Series Title: CHI '18.

[17] Julia Ayumi Bopp, Jan B. Vornhagen, and Elisa D. Mekler. 2021. "My Soul Got a Little Bit Cleaner": Art Experience in Videogames. *Proceedings of the ACM on Human-Computer Interaction* 5, CHI PLAY (Oct. 2021), 237:1–237:19. doi:10.1145/3474664

[18] Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 2 (Jan. 2006), 77–101. doi:10.1191/1478088706qp063oa

[19] Virginia Braun and Victoria Clarke. 2021. Can I use TA? Should I use TA? Should I *not* use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research* 21, 1 (March 2021), 37–47. doi:10.1002/capr.12360

[20] Virginia Braun and Victoria Clarke. 2021. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology* 18, 3 (July 2021), 328–352. doi:10.1080/14780887.2020.1769238

[21] Virginia Braun and Victoria Clarke. 2021. *Thematic analysis: A practical guide.* SAGE Publications Ltd, London.

[22] Virginia Braun and Victoria Clarke. 2023. Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a *knowing* researcher. *International Journal of Transgender Health* 24, 1 (Jan. 2023), 1–6. doi:10.1080/26895269.2022.2129597

[23] Virginia Braun, Victoria Clarke, Elicia Boulton, Louise Davey, and Charlotte McEvoy. 2021. The online survey as a *qualitative* research tool. *International Journal of Social Research Methodology* 24, 6 (Nov. 2021), 641–654. doi:10.1080/13645579.2020.1805550

[24] David Byrne. 2022. A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity* 56, 3 (2022), 1391–1412.

[25] Galactic Cafe. 2013. *The Stanley Parable.* https://www.stanleyparable.com/ Published: Game [Windows, Linux, macOS].

[26] Capcom. 2012. *Dragon's Dogma.* https://www.dragonsdogma.com/ Published: Game [Windows, PlayStation 3, PlayStation 4, Xbox 360, Xbox One, Nintendo Switch].

[27] CD Project Red. 2020. *Cyberpunk 2077.* https://www.cyberpunk.net/ Published: Game [Windows, macOS, PlayStation 4, PlayStation 5, Xbox One, Xbox Series X/S, Nintendo Switch 2].

[28] Michelle Colder Carras, Antonius J. Van Rooij, Donna Spruijt-Metz, Joseph Kvedar, Mark D. Griffiths, Yorghos Carabas, and Alain Labrique. 2018. Commercial Video Games As Therapy: A New Research Agenda to Unlock the Potential of a Global Pastime. *Frontiers in Psychiatry* 8 (Jan. 2018), 300. doi:10.3389/fpsyt.2017.00300

[29] Tom Cole, Paul Cairns, and Marco Gillies. 2015. Emotional and Functional Challenge in Core and Avant-garde Games. In *Proceedings of the 2015 Annual Symposium on Computer-Human Interaction in Play* (London, United Kingdom) *(CHI PLAY '15)*. Association for Computing Machinery, New York, NY, USA, 121–126. doi:10.1145/2793107.2793147

[30] Tom Cole and Marco Gillies. 2021. Thinking and Doing: Challenge, Agency, and the Eudaimonic Experience in Video Games. *Games and Culture* 16, 2 (2021), 187–207. doi:10.1177/1555412019881536

[31] Tom Cole and Marco Gillies. 2022. Emotional Exploration and the Eudaimonic Gameplay Experience: A Grounded Theory. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (New Orleans, LA, USA) *(CHI '22)*. Association for Computing Machinery, New York, NY, USA, Article 470, 16 pages. doi:10.1145/3491102.3502002

[32] Cardboard Computer. 2020. *Kentucky Route Zero.* http://kentuckyroutezero.com/ Published: Game [Windows, Linux, macOS, iOs, Android, PlayStation 4, PlayStation 5, Xbox One, Xbox Series X/S].

[33] Amanda Cote and Julia G. Raz. 2015. In-depth interviews for games research. In *Game Research Methods*. ETC Press, Pittsburgh, PA, USA, 93–116.

[34] Rui Craveirinha and Licinio Roque. 2019. Impact of Game Elements in Players Artistic Experience. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems* (Glasgow, Scotland Uk) *(CHI EA '19)*. Association for Computing Machinery, New York, NY, USA, 1–6. doi:10.1145/3290607.3313049

[35] Rowan Daneels, Nicholas D. Bowman, Daniel Possler, and Elisa D. Mekler. 2021. The 'eudaimonic experience': A scoping review of the concept in digital games research. *Media and Communication* 9, 2 (2021), 178–190. doi:10.17645/mac.v9i2.3824

[36] Rowan Daneels, Heidi Vandebosch, and Michel Walrave. 2023. "Deeper Gaming": A Literature Review and Research Agenda on Eudaimonia in Digital Games Research. *Technology, Mind, and Behavior* 4, 2: Summer 2023 (2023), 1–30. doi:10.1037/tmb0000108

[37] Edward L. Deci and Richard M. Ryan. 2008. Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies* 9, 1 (2008), 1–11. doi:10.1007/s10902-006-9018-1

[38] Deconstructeam. 2023. *The Cosmic Wheel Sisterhood.* https://www.cosmicwheelsisterhood.com/gate Published: Game [Windows, Nintendo Switch].

[39] Alena Denisova, Julia Ayumi Bopp, Thuy Duong Nguyen, and Elisa D Mekler. 2021. "Whatever the Emotional Experience, It's Up to Them": Insights from Designers of Emotionally Impactful Games. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (Yokohama, Japan) *(CHI '21)*. Association for Computing Machinery, New York, NY, USA, Article 120, 9 pages. doi:10.1145/3411764.3445286

[40] Abstraction Games Dennaton Games. 2015. *Hotline Miami 2: Wrong Number.* https://hotlinemiami.com Published: Game [Windows, Linux, OSX, PlayStation 3, PlayStation 4, PlayStation 5, PlayStation Vita, Xbox One, Xbox Series X/S, Nintendo Switch, Stadia].

[41] Nisha Devasia, Georgia Kenderova, Michele Newman, Julie Kientz, and Jin Ha Lee. 2025. "I Would Not Be This Version of Myself Today": Elaborating on the Effects of Eudaimonic Gaming Experiences. doi:10.1145/3748633 arXiv:2507.18084 [cs].

[42] Mobius Digital. 2019. *Outer Wilds.* https://www.mobiusdigitalgames.com/outer-wilds.html Published: Game [Windows, XBox One, XBox Series X/S, Playstation 4, Playstation 5, Nintendo Switch].

[43] Quantic Dream. 2018. *Detroit: Become Human.* https://www.quanticdream.com/en/detroit-become-human Published: Game [Windows, PlayStation 4, Xbox One].

[44] EA. 2016. *Battlefield 1.* https://www.ea.com/games/battlefield/battlefield-1 Published: Game [Windows, PlayStation 4, Xbox One].

[45] Nintendo EAD. 1993. *The Legend of Zelda: Link's Awakening.* https://web.archive.org/web/20050829182629/http://zelda.com/universe/game/awakening/ Published: Game [Game Boy].

[46] Nintendo EAD. 1998. *The Legend of Zelda: Ocarina of Time.* https://www.nintendo.co.jp/n01/n64/software/zelda/index.html Published: Game [Nintendo 64, GameCube, iQue Player].

[47] Unknown Worlds Entertainment. 2018. *Subnautica.* https://unknownworlds.com/en/news?game=subnautica Published: Game [Windows, OSX, iOS, Android, PlayStation 3PlayStation 4, PlayStation 5, Xbox One, Xbox Series X/S, Nintendo Switch].

[48] Nintendo EPD. 2017. *The Legend of Zelda: Breath of the Wild.* https://www.nintendo.com/us/store/products/the-legend-of-zelda-breath-of-the-wild-nintendo-switch-2-edition-switch-2/ Published: Game [Nintendo Wii U, Nintendo Switch, Nintendo Switch 2].

[49] Nintendo EPD. 2023. *The Legend of Zelda: Tears of the Kingdom.* https://www.nintendo.com/us/store/products/the-legend-of-zelda-tears-of-the-kingdom-switch/ Published: Game [Nintendo Switch, Nintendo Switch 2].

[50] Karam Eum and Young Yim Doh. 2023. A thematic analysis of bereaved adults' meaning-making experience of loss through playing video games. *Frontiers in Psychology* 14 (July 2023), 1154976. doi:10.3389/fpsyg.2023.1154976

[51] Karam Eum, Valérie Erb, Subin Lin, Sungpil Wang, and Young Yim Doh. 2021. How the Death-themed Game Spiritfarer Can Help Players Cope with the Loss of a Loved One. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems.* ACM, Yokohama Japan, 1–6. doi:10.1145/3411763.3451608

[52] Rowanne Fleck and Geraldine Fitzpatrick. 2010. Reflecting on Reflection: Framing a Design Landscape. In *Proceedings of the 22nd Conference of the Computer-Human Interaction Special Interest Group of Australia on Computer-Human Interaction (OZCHI '10).* Association for Computing Machinery, New York, NY, USA, 216–223. doi:10.1145/1952222.1952269 event-place: Brisbane, Australia.

[53] Theresa M. Fleck, Lynda Bavin, Karolina Stasiak, Eve Hermansson-Webb, Sally N. Merry, Colleen Cheek, Mathijs Lucassen, Ho Ming Lau, Britta Pollmuller, and Sarah Hetrick. 2017. Serious Games and Gamification for Mental Health: Current Status and Promising Directions. *Frontiers in Psychiatry* 7 (Jan. 2017), 1–7. doi:10.3389/fpsyt.2016.00215

[54] Game Freak. 1999. *Pokémon Gold.* https://www.pokemon.com/us/pokemon-video-games/pokemon-gold-version-and-pokemon-silver-version Published: Game [Game Boy Color].

[55] Game Freak. 2022. *Pokémon Violet.* https://scarletviolet.pokemon.com/en-gb/ Published: Game [Nintendo Switch].

[56] FromSoftware. 2009. *Demon's Souls.* https://atlus.com/atlus-titles/demons-souls/#upcp-user-tab-panel-1/ Published: Game [PlayStation 3].

[57] FromSoftware. 2011. *Dark Souls.* https://en.bandainamcoent.eu/dark-souls/dark-souls Place: Tokyo, Japan Published: Game [PlayStation 3, Xbox 360, Windows, PlayStation 4, Xbox One, Nintendo Switch].

[58] FromSoftware. 2019. *Sekiro: Shadows Die Twice.* https://www.sekirothegame.com/ Published: Game [Windows, PlayStation 4, Xbox One, Stadia].

[59] Dennaton Games. 2012. *Hotline Miami.* https://hotlinemiami.com Published: Game [Windows, Linux, OSX, PlayStation 3, PlayStation 4, PlayStation 5, PlayStation Vita, Xbox One, Xbox Series X/S, Nintendo Switch, Stadia].

[60] Frictional Games. 2015. *Soma.* https://www.somagame.com/ Published: Game [Windows, Linux, OSX PlayStation 4, XBox One].

[61] Giant Sparrow. 2017. *What Remains of Edith Finch.* https://www.annapurna.com/interactive/what-remains-of-edith-finch Published: Game [Windows, iOS, PlayStation 4, PlayStation 5, Xbox One, Xbox Series X/S, Nintendo Switch].

[62] Scientific Software Development GmbH. 2022. ATLAS.ti. https://atlasti.com

[63] Veronika Huta. 2017. Meaning as a Subjective Experience. *Journal of Constructivist Psychology* 30, 1 (Jan. 2017), 20–25. doi:10.1080/10720537.2015.1119088

[64] Veronika Huta. 2020. How distinct are eudaimonia and hedonia? It depends on how they are measured. *Journal of Well-Being Assessment* 4, 3 (Dec. 2020), 511–537. doi:10.1007/s41543-021-00046-4

[65] Veronika Huta and Alan S. Waterman. 2014. Eudaimonia and Its Distinction from Hedonia: Developing a Classification and Terminology for Understanding Conceptual and Operational Definitions. *Journal of Happiness Studies* 15, 6 (Dec. 2014), 1425–1456. doi:10.1007/s10902-013-9485-0

[66] Ioanna Iacovides, Joe Cutting, Jen Beeston, Marta E. Cecchinato, Elisa D. Mekler, and Paul Cairns. 2022. Close but Not Too Close: Distance and Relevance in Designing Games for Reflection. *Proceedings of the ACM on Human-Computer Interaction* 6, CHI PLAY (Oct. 2022), 1–24. doi:10.1145/3549487

[67] Ioanna Iacovides and Elisa D. Mekler. 2019. The Role of Gaming During Difficult Life Experiences. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems.* ACM, Glasgow Scotland Uk, 1–12. doi:10.1145/3290605.3300453

[68] Sandfall Interactive. 2025. *Clair Obscur: Expedition 33.* https://www.expedition33.com/ Published: Game [Windows, XBox Series X/S, Playstation 5.

[69] Fishlabs Iron Gate Studio. 2023. *Valheim.* https://www.valheimgame.com/ Published: Game [Windows, Linux, macOS, Xbox One, Xbox Series X/S].

[70] Glena H. Iten, Sharon T. Steinemann, and Klaus Opwis. 2018. Choosing to Help Monsters: A Mixed-Method Examination of Meaningful Choices in Narrative-Rich Games and Interactive Narratives. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems.* ACM, Montreal QC Canada, 1–13.

[71] Rilla Khaled. 2018. Questions Over Answers: Reflective Game Design. In *Playful Disruption of Digital Media,* Daniel Cermak-Sassenrath (Ed.). Springer Singapore, Singapore, 3–27. doi:10.1007/978-981-10-1891-6_1

[72] Eric Klopfer, Jason Haas, Scot Osterweil, and Louisa Rosenheck. 2018. *Resonant Games: Design Principles for Learning Games that Connect Hearts, Minds, and the Everyday.* The MIT Press, Cambridge, MA. doi:10.7551/mitpress/10887.001.0001 _eprint: https://direct.mit.edu/book-pdf/2262038/book_9780262346078.pdf.

[73] Emmi L. K. Kärnä, Jaakko Väkevä, Heidi Rautalahti, and Janne Lindqvist. 2024. Questions without Answers: Enjoyment of Irresolution in Mystery Player Experience. *Proceedings of the ACM on Human-Computer Interaction* 8, CHI PLAY (Oct. 2024), 1–28. doi:10.1145/3677100

[74] Dmitry A. Leontiev. 2013. Personal meaning: A challenge for psychology. *The Journal of Positive Psychology* 8, 6 (Nov. 2013), 459–470. doi:10.1080/17439760.2013.830767

[75] Future Cat LLC. 2016. *OneShot: World Machine Edition.* https://store.steampowered.com/app/2915460/OneShot_World_Machine_Edition/ Published: Game [Windows, macOS, Linux, Nintendo Switch, PlayStation 4, XBox One].

[76] Prism Game Studios Ltd. 2015. *Portal Stories: Mel.* https://store.steampowered.com/app/317400/Portal_Stories_Mel/ Published: Game [Windows].

[77] Lauri Lukka and J Matias Palva. 2023. The Development of Game-Based Digital Mental Health Interventions: Bridging the Paradigms of Health Care and Entertainment. *JMIR Serious Games* 11 (Sept. 2023), e42173. doi:10.2196/42173

[78] Maddy Makes Games. 2018. *Celeste.* https://www.celestegame.com/ Published: Game [Windows, Linux, macOS, PlayStation 4, Xbox One, StadiaNintendo Switch].

[79] Regan Lee Mandryk and Max Valentin Birk. 2017. Toward Game-Based Digital Mental Health Interventions: Player Habits and Preferences. *Journal of Medical Internet Research* 19, 4 (April 2017), e128. doi:10.2196/jmir.6906

[80] Tim Marsh and Brigid Costello. 2013. Lingering Serious Experience as Trigger to Raise Awareness, Encourage Reflection and Change Behavior. In *Persuasive Technology,* Shlomo Berkovsky and Jill Freyne (Eds.). Springer Berlin Heidelberg, Berlin, Heidelberg, 116–124.

[81] Nora McDonald, Sarita Schoenebeck, and Andrea Forte. 2019. Reliability and Inter-rater Reliability in Qualitative Research: Norms and Guidelines for CSCW and HCI Practice. *Proceedings of the ACM on Human-Computer Interaction* 3, CSCW (Nov. 2019), 1–23. doi:10.1145/3359174

[82] Elisa D. Mekler and Kasper Hornbæk. 2016. Momentary Pleasure or Lasting Meaning? Distinguishing Eudaimonic and Hedonic User Experiences. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (San Jose, California, USA) *(CHI '16).* Association for Computing Machinery, New York, NY, USA, 4509–4520. doi:10.1145/2858036.2858225

[83] Elisa D. Mekler and Kasper Hornbæk. 2019. A Framework for the Experience of Meaning in Human-Computer Interaction. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems.* ACM, Glasgow Scotland Uk, 1–15. doi:10.1145/3290605.3300455

[84] Elisa D. Mekler, Ioanna Iacovides, and Julia Ayumi Bopp. 2018. "A Game that Makes You Question...": Exploring the Role of Reflection for the Player Experience. In *Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play* (Melbourne, VIC, Australia) *(CHI PLAY '18).* Association for Computing Machinery, New York, NY, USA, 315–327. doi:10.1145/3242671.3242691

[85] Josh Aaron Miller, Kutub Gandhi, Matthew Alexander Whitby, Mehmet Kosa, Seth Cooper, Elisa D. Mekler, and Ioanna Iacovides. 2024. A Design Framework for Reflective Play. In *Proceedings of the CHI Conference on Human Factors in Computing Systems.* ACM, Honolulu HI USA, 1–21. doi:10.1145/3613904.3642455

[86] Sahar Mirhadi, Ioanna Iacovides, and Alena Denisova. 2024. Playing Through Tough Times: Exploring the Relationship between Game Aspects and Coping Strategies during Difficult Life Challenges. *Proceedings of the ACM on Human-Computer Interaction* 8, CHI PLAY (Oct. 2024), 1–25. doi:10.1145/3677097

[87] Naughty Dog. 2013. *The Last of Us.* https://www.playstation.com/en-us/the-last-of-us/ Place: Santa Monica, USA Published: Game[Playstation 4, Playstation 5, PC].

[88] Erich Neuwirth. 2022. *RColorBrewer: ColorBrewer Palettes.* CRAN. doi:10.32614/CRAN.package.RColorBrewer R package version 1.1-3.

[89] Rockstar North. 2008. *Grand Theft Auto IV.* https://www.rockstargames.com/games/IV Place: Edinburgh, UK Published: Game [Windows, PlayStation 3, Xbox 360].

[90] Mary Beth Oliver, Nicholas Bowman, Julia Woolley, Ryan Rogers, Brett Sherrick, and Mun-Young Chung. 2015. Video Games as Meaningful Entertainment Experiences. *Psychology of Popular Media Culture* 5 (04 2015), 390–405. doi:10.1037/ppm0000066

[91] Francisco M. Olmos-Vega, Renée E. Stalmeijer, Lara Varpio, and Renate Kahlke. 2023. A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Medical Teacher* 45, 3 (March 2023), 241–251. doi:10.1080/0142159X.2022.2057287

[92] P-Studio. 2016. *Persona 5.* https://atlus.com/persona5/ Published: Game [PlayStation 3, PlayStation 4.

[93] P-Studio. 2020. *Persona 5 Royal.* https://persona.atlus.com/p5r/?lang=en Published: Game [Windows, Nintendo Switch, PlayStation 4, PlayStation 5, Xbox

One, Xbox Series X/S.

[94] The Parasight. 2022. *Blacktail*. https://www.focus-entmt.com/en/games/blacktail Published: Game [Windows, PlayStation 5, Xbox Series X/S].

[95] Thomas Lin Pedersen. 2024. *patchwork: The Composer of Plots*. CRAN. doi:10.32614/CRAN.package.patchwork R package version 1.3.0.

[96] Xiaolan Peng, Jin Huang, Alena Denisova, Hui Chen, Feng Tian, and Hongan Wang. 2020. A Palette of Deepened Emotions: Exploring Emotional Challenge in Virtual Reality Games. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (Honolulu, HI, USA) *(CHI '20)*. Association for Computing Machinery, New York, NY, USA, 1–13. doi:10.1145/3313831.3376221

[97] Andrew M Phelps, Jocelyn Wagner, and Andrew Moger. 2020. Experiential Depression and Anxiety Through Proceduralized Play: A Case Study of Fragile Equilibrium. *Journal of Games, Self, & Society* 2, 1 (2020), 104–149.

[98] Roosa Piitulainen. 2025. *Capturing Qualities of Feel: Connecting Game Feel and Interaction Aesthetics*. phdthesis. IT University of Copenagen. https://pure.itu.dk/ws/portalfiles/portal/112763527/Thesis_final_Version_Roosa.pdf

[99] Daniel Possler. 2024. Video Games as Meaningful or Eudaimonic Experiences. In *Oxford Research Encyclopedia of Communication*. Oxford University Press, Oxford, England. doi:10.1093/acrefore/9780190228613.013.1485

[100] Daniel Possler, Nicholas David Bowman, and Rowan Daneels. 2023. Explaining the formation of eudaimonic gaming experiences: a theoretical overview and systemization based on interactivity and game elements. *Frontiers in Communication* 8 (Sept. 2023), 1215960. doi:10.3389/fcomm.2023.1215960

[101] Daniel Possler, Rowan Daneels, and Nicholas D. Bowman. 2024. Players Just Want to Have Fun? An Exploratory Survey on Hedonic and Eudaimonic Game Motives. *Games and Culture* 19, 5 (July 2024), 611–633. doi:10.1177/15554120231182498

[102] Interplay Productions. 1997. *Fallout*. https://web.archive.org/web/19970415010914/http://www.interplay.com/fallout/ Published: Game [MS-DOS, Windows, Mac OS, OSX].

[103] Kojima Productions. 2015. *Metal Gear Solid V: The Phantom Pain*. https://store.steampowered.com/app/287700/METAL_GEAR_SOLID_V_THE_PHANTOM_PAIN/ Place: Tokyo, Japan Published: Game [Windows, Xbox 360, Xbox One, PlayStation 3, PlayStation 4.

[104] R Core Team. 2025. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. https://www.R-project.org/

[105] Heidi Rautalahti. 2019. "How video games changed my life": Life-Changing Testimonies and The Last of Us. *gamevironments* 10 (2019), 1–38. http://www.gamevironments.uni-bremen.de/

[106] Heidi Rautalahti. 2021. Non-religious Players Asking Big Questions: Video Game Worlds Affording Affinities of Meaningful Encounters. *The Journal of Religion and Popular Culture* 33, 2 (July 2021), 69–88. doi:10.3138/jrpc.2020-0012

[107] Hartmut Rosa. 2018. The idea of resonance as a sociological concept. *Global dialogue* 8, 2 (2018), 41–44.

[108] Hartmut Rosa and James C. Wagner. 2019. *Resonance : a sociology of our relationship to the world*. Polity, Cambridge, England ;. Publication Title: Resonance : a sociology of our relationship to the world.

[109] rose engine. 2022. *Signalis*. https://rose-engine.org/signalis/ Published: Game [Windows, Nintendo Switch, PlayStation 4, XBox One].

[110] RStudio Team. 2016. *RStudio: Integrated Development Environment for R*. Posit PBC. http://www.rstudio.com/ Place: Boston, MA.

[111] Doris C Rusch. 2020. Existential, Transformative Game Design. *JGSS* 2 (2020), 1–39.

[112] Ian Ruthven. 2021. Resonance and the experience of relevance. *Journal of the Association for Information Science and Technology* 72, 5 (May 2021), 554–569. doi:10.1002/asi.24424

[113] Secret Lab and Infinite Fall. 2017. *Night in the Woods*. http://nightinthewoods.com/ Place: Hobart, Australia Published: Game [Windows, macOS, Linux, PlayStation 4, Xbox One, Nintendo Switch, iOS].

[114] Constantine Sedikides, Tim Wildschut, Clay Routledge, Jamie Arndt, Erica G. Hepper, and Xinyue Zhou. 2015. To Nostalgize: Mixing Memory with Affect and Desire. In *Advances in Experimental Social Psychology*. Vol. 51. Elsevier, Amsterdam, Netherlands, 189–273. doi:10.1016/bs.aesp.2014.10.001

[115] Phoebe Sengers, Kirsten Boehner, Shay David, and Joseph 'Jofish' Kaye. 2005. Reflective design. In *Proceedings of the 4th decennial conference on Critical computing: between sense and sensibility*. ACM, Aarhus Denmark, 49–58. doi:10.1145/1094562.1094569

[116] Nippon Ichi Software. 2020. *Mad Rat Dead*. https://www.nisamerica.com/games/mad-rat-dead Published: Game [Nintendo Switch, PlayStation 4].

[117] Katta Spiel, Oliver L. Haimson, and Danielle Lottridge. 2019. How to do better with gender on surveys: a guide for HCI researchers. *Interactions* 26, 4 (June 2019), 62–65. doi:10.1145/3338283

[118] Velvet Spors, Oğuz 'Oz' Buruk, and Juho Hamari. 2024. Ecological In/Congruence: Becoming Sensitised to Nature in Video Games through Humanistic First-Person Research. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*. ACM, Honolulu HI USA, 1–16. doi:10.1145/3613904.3642659

[119] Velvet Spors, Oğuz 'Oz' Buruk, and Juho Hamari. 2025. Human-Nature Relationships through Video Games: An Exploration of Players' Sense-Making. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. ACM, Yokohama Japan, 1–17. doi:10.1145/3706598.3713207

[120] Velvet Spors and Imo Kaufman. 2021. Respawn, Reload, Relate: Exploring the Self-Care Possibilities for Mental Health in Games through a Humanistic Lens. *Proceedings of the ACM on Human-Computer Interaction* 5, CHI PLAY (Oct. 2021), 1–31. doi:10.1145/3474690

[121] Square. 1990. *Final Fantasy III*. https://finalfantasyviipc.square-enix-games.com/en Published: Game [NES, iOS, Android, Windows, Nintendo Switch, PlayStation 4, Xbox Series X/S].

[122] Square. 1997. *Final Fantasy VII*. https://finalfantasyviipc.square-enix-games.com/en Published: Game [PlayStation, Windows, iOS, PlayStation 4, Android, Nintendo Switch, XBox One].

[123] Square. 2000. *Final Fantasy IX*. https://finalfantasy-ix.square-enix-games.com/en-us/home/ Published: Game [PlayStation, Windows, iOS, PlayStation 4, Android, Nintendo Switch, XBox One].

[124] Jupiter Square Enix. 2007. *The World Ends with You*. https://www.square-enix-games.com/games/neo-the-world-ends-with-you Published: Game [Nintendo DS, iOS, Android, Nintendo Switch].

[125] Bethesda Game Studios. 2006. *The Elder Scrolls IV: Oblivion*. https://elderscrolls.bethesda.net/en/oblivion Place: Bethesda, USA Published: Game [Windows, PlayStation 3, Xbox 360].

[126] Bethesda Game Studios. 2011. *The Elder Scrolls V: Skyrim*. https://elderscrolls.bethesda.net/en/skyrim10 Place: Bethesda, USA Published: Game [Windows, PlayStation 3, PlayStation 4, PlayStation 5, Xbox 360, Xbox One, Xbox Series X/S, Nintendo Switch].

[127] Bloober Team. 2024. *Silent Hill 2*. https://store.steampowered.com/app/2124490/SILENT_HILL_2/ Published: Game [Windows, PlayStation 5].

[128] Nina Tepponen, Prabhav Bhatnagar, Jaakko Väkevä, and Perttu Hämäläinen. 2025. Towards Understanding Waiting in Video Games. *Proc. ACM Hum.-Comput. Interact.* 9, 6, Article GAMES018 (Oct. 2025), 32 pages. doi:10.1145/3748613

[129] Thatgamecompany, Inc. 2012. *Journey*. https://thatgamecompany.com/journey/ Place: California, United States Published: Game [PlayStation 3, PlayStation 4, Windows, iOS].

[130] Thunder Lotus Games. 2020. *Spiritfarer*. https://thunderlotusgames.com/games/spiritfarer/ Place: Montreal, Canada Published: Game [Linux, macOS, Windows, Nintendo Switch, PlayStation 4, Xbox One, Stadia, iOS, Android.

[131] April Tyack and Elisa D. Mekler. 2024. Self-Determination Theory and HCI Games Research: Unfulfilled Promises and Unquestioned Paradigms. *ACM Trans. Comput.-Hum. Interact.* 31, 3, Article 40 (Aug. 2024), 74 pages. doi:10.1145/3673230

[132] Valve. 2011. *Portal 2*. https://www.thinkwithportals.com/ Published: Game [Windows, macOS, Linux, PlayStation 3, Xbox 360, Nintendo Switch].

[133] Videocult. 2017. *Rain World*. https://rainworldgame.com/ Published: Game [Windows, PlayStation 4, PlayStation 5, Xbox one, Xbox Series X/S, Nintendo Switch].

[134] Jan B Vornhagen. 2025. *Challenges in Conducting Theory-Informed Empirical Player Experience Research*. PhD. ITU, Copenhagen.

[135] Jan B. Vornhagen, Dan Bennett, Dooley Murphy, and Elisa D. Mekler. 2023. "I'm the leader and I'm going to save the world": Characterizing Empowering and Disempowering Game Experiences. *Proceedings of the ACM on Human-Computer Interaction* 7, CHI PLAY (Sept. 2023), 1330–1360. doi:10.1145/3611071

[136] Jaakko Väkevä, Perttu Hämäläinen, and Janne Lindqvist. 2025. "Don't You Dare Go Hollow": How Dark Souls Helps Players Cope with Depression, a Thematic Analysis of Reddit Discussions. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*. ACM, Yokohama Japan, 1–20. doi:10.1145/3706598.3714075

[137] Jaakko Väkevä, Elisa D. Mekler, and Janne Lindqvist. 2024. From Disorientation to Harmony: Autoethnographic Insights into Transformative Videogame Experiences. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*. ACM, Honolulu HI USA, 1–20. doi:10.1145/3613904.3642543

[138] Matthew Alexander Whitby, Sebastian Deterding, and Ioanna Iacovides. 2019. "One of the baddies all along": Moments that Challenge a Player's Perspective. In *Proceedings of the Annual Symposium on Computer-Human Interaction in Play* (Barcelona, Spain) *(CHI PLAY '19)*. Association for Computing Machinery, New York, NY, USA, 339–350. doi:10.1145/3311350.3347192

[139] Matthew Alexander Whitby, Ioanna Iacovides, and Sebastian Deterding. 2023. "Conversations with pigeons": Capturing Players' Lived Experience of Perspective Challenging Games. *Proceedings of the ACM on Human-Computer Interaction* 7, CHI PLAY (Sept. 2023), 833–855. doi:10.1145/3611051

[140] Hadley Wickham, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, Alex Hayes, Lionel Henry, Jim Hester, Max Kuhn, Thomas Lin Pedersen, Evan Miller, Stephan Milton Bache, Kirill Müller, Jeroen Ooms, David Robinson, Dana Paige Seidel, Vitalie Spinu, Kohske Takahashi, Davis Vaughan, Claus Wilke, Kara Woo, and Hiroaki Yutani. 2019. Welcome to the tidyverse. *Journal of Open*

Source Software 4, 43 (2019), 1686. doi:10.21105/joss.01686

[141] Hadley Wickham and Jennifer Bryan. 2025. *readxl: Read Excel Files*. CRAN. doi:10.32614/CRAN.package.readxl R package version 1.4.5.

[142] Tim Wulf, Diana Rieger, and Josephine B. Schmitt. 2018. Blissed by the past: Theorizing media-induced nostalgia as an audience response factor for entertainment and well-being. *Poetics* 69 (Aug. 2018), 70–80. doi:10.1016/j.poetic.

2018.04.001

[143] ZA/UM. 2019. *Disco Elysium*. https://discoelysium.com/ Published: Game [macOS, Windows, Nintendo Switch, PlayStation 4, PlayStation 5, Xbox One, Xbox Series X/S, Stadia, Android.

A Overview of most frequently mentioned game titles

Table A1: Table of the most commonly mentioned videogames. Game titles were mentioned individually, but, for this overview, they were grouped by us into their respective franchises. Release Dates refer to the first release of the game.

Games/Games franchise	Mentions	Release Date
Outer Wilds [42]	9	2019
Legend of Zelda Franchise	5	
The Legend of Zelda: Tears of the Kingdom [49] (two mentions)		2023
The Legend of Zelda: Breath of the Wild [48]		2017
The Legend of Zelda: Link's Awakening [45]		1993
The Legend of Zelda: Ocarina of Time [46]		1998
Final Fantasy Franchise	4	
Final Fantasy III [121]		1990
Final Fantasy VII [122]		1997
Final Fantasy IX [123]		2000
Final Fantasy X [1]		2001
Clair Obscur: Expedition 33 [68]	3	2025
Disco Elysium [143]	3	2019
Mass Effect Franchise	3	
Mass Effect [12]		2007
Mass Effect 2 [13] (two mentions)		2010
Persona 5 (Royal) [92, 93]	3	2016 (2020)
Fallout [102]	2	1997
OneShot [75]	2	2016
Pokémon Franchise	2	
Pokémon Gold [54]		1999
Pokémon Violet [55]		2022
Signalis [109]	2	2022
Soma [60]	2	2015
Souls Franchise	2	
Dark Souls [57]		2011
Demon's Souls [56]		2009
The Elder Scrolls Franchise	2	
Oblivion [125]		2006
Skyrim [126]		2018
The Last of Us [87]	2	2013
The Stanley Parable [25]	2	2013
Valheim [69]	2	2023
What Remains of Edith Finch [61]	2	2017

B Summarizing overview of themes

Table B1: Overview of our four themes that depict different facets of players' resonating game experiences, including brief descriptions of each theme along with examples of representative participant quotes.

Theme	Description	Example Participant Quotes
Resonance as Emotional Impact	Players associated resonance with a deep emotional impact, reporting wide range of profound, complex, and memorable emotional responses, such as sadness, joy, crying, insight, awe, catharsis, and emptiness with their game experiences.	"The ending brings up a lot of complex emotions of loss but also hope and gratefulness." (P97; *Portal Stories: Mel* [76]) "[It] made me cry for 5 minutes, when i hadnt cried in years at that point." (P74; *Signalis* [109])
Resonance as Personal Connection	Players associated resonance with a sense of relating to the game experience on an intimate level, for example, with the game mirroring the players' own lived experiences or aspects of their self-identity.	"It reflected real life back to me, reminding me that the character I've been playing is indeed me." (P56; *Rain World* [133]) "It is a story of a man trying to figure himself out and at the time I was working through my studies and figuring out the next steps." (P42; *Disco Elysium*)
Sparking Real-Life Outcomes	Players related resonance also to various real-life consequences that transpired beoynd the immediate gameplay context, for example, fostering self-understanding or empowerment, or prompting journeys of self-development or personal transformation.	"I don't honestly think I'd be the same person I am today if I hadn't played it; I don't think I'd know even half of what I know about myself today." (P18; *The World Ends With You* [124]) "It made me consider my own life. It put me on a different, better track." (P32; *Silent Hill 2 (Remake)* [127])
Resonance as Interaction	Players described how resonance was conveyed through the game's interactive mechanisms, for example, by using interaction as a form of storytelling or by aligning gameplay mechanics with narrative themes.	"[The game] managed to rather seamlessly prove its point via gameplay mechanics." (P98; *Spiritfarer* [130]) "It managed to be one of the most memorable experiences I have ever had with a game, simply by using game design to communicate feelings." (P29; *Final Fantasy III* [121]).