Seeing Your Own Mind Playing Out on the Screen: A Constructivist Grounded Theory of Video Games as Dynamic Coping Systems

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Whilst video games have shown their capacity to support coping during periods of personal difficulty, there remains a limited understanding of exactly how they scaffold these outcomes. Adopting a Constructivist Grounded Theory approach, this interview study explores the lived experiences of 17 players across three video games: *Disco Elysium*, *Darkest Dungeon*, and *Stardew Valley*. Drawing on the analysis, we propose the *Games as Dynamic Coping Systems* model, which illustrates a dynamic, recursive relationship between players, game aspects, coping mechanisms and coping outcomes. Our findings provide an in-depth account of the distinct ways in which different games can support coping. The study contributes a theoretical framework that enriches our understanding of gaming as a valuable form of coping during difficult life experiences.

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

Additional Key Words and Phrases: Video games, Game Aspects, Wellbeing, Coping, Difficult Life Experiences, Grounded Theory

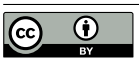
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1 Introduction

Video games are a widely accessible resource that many individuals turn to during challenging periods in their lives [9, 64, 73]. Given the growing reliance on video games during times of personal difficulty, such as mental health challenges [51, 55], unemployment [54] or grief [29, 57, 76], understanding how they can support various coping mechanisms has become an important area of study. Research by Iacovides and Mekler [44] found that games provide much-needed respite and social connection during difficult life experiences, as well as opportunities for emotional processing and personal growth, while Reinecke [69] has highlighted their role in post-work recovery and in reducing stress. Recent research by Farmer et al. [30] and Formosa et al. [34] has also explored how digital play may serve as a compensatory activity, helping individuals regain a sense of purpose when difficulties restrict real-world autonomy.

While previous work has established that digital games can support a range of coping strategies, including emotion-focused, avoidance, and meaning-focused coping through game aspects such as Challenge and Narrative [60], there remains a gap in understanding how specific game aspects

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may influence and support different coping mechanisms and how these vary across game types. Addressing this gap is important for moving toward a more contextual understanding of specific game features and how they may be intentionally leveraged as resources to support coping. Additionally, many players already use commercial games as a coping mechanism in times of difficulty (e.g., [64]). Still, we lack a deeper understanding of the underlying mechanisms which are guiding this. Thus, there is a need to investigate further how and why games could support coping.

To address these gaps, we investigate how various aspects of video games influence individuals' coping during periods of personal difficulty and how these differ across games. We conducted a qualitative investigation using Constructivist Grounded Theory (CGT) [16], interviewing 17 participants who engaged with at least one of three games: *Disco Elysium* (Narrative RPG), *Darkest Dungeon* (Roguelike), and *Stardew Valley* (Life Simulation), each offering distinct ways for players to cope through gameplay. By exploring players' lived experiences with these games during periods of personal difficulty, we provide a deeper understanding of how these coping mechanisms are constructed within specific gameplay contexts. The main contribution of the paper is the introduction of a conceptual model of *Games as Dynamic Coping Systems*, which views gaming and coping in the face of personal difficulties as a dynamic, recursive process. The model also highlights how the process is shaped by interactions among players, game aspects, coping mechanisms, and outcomes that, in turn, influence future gameplay and coping methods.

2 Related Work

2.1 Video Games and Wellbeing

Initial work on video games and wellbeing focused primarily on potential risks such as addiction and adverse social effects [52]. More recently, there has been a notable shift towards recognising how video games can promote wellbeing, including recovery (e.g., [58]), emotional regulation (e.g., [82]), and additional positive wellbeing outcomes (e.g., [42, 43, 45]). The importance of games in promoting wellbeing became increasingly evident during the COVID-19 pandemic, when research demonstrated how games preserved a sense of normalcy amid widespread isolation (e.g., [47]). Research has also focused on gaming during periods of difficulty [22, 35, 44, 72], reinforcing the idea that digital games can be a valuable tool for meaning-making during destabilising times [8, 76] or through fostering healthy escapism [62]. To better understand how games support wellbeing, research has focused on processes such as emotion regulation, mood management, and coping.

Emotion regulation refers to the processes by which individuals influence which emotions they experience, when they occur, and how they are experienced or expressed [39]. Within games and HCI research, video games are increasingly understood as contexts in which players may engage in emotion regulation through a range of psychological and interactional processes [35, 82]. Players may, for example, use gameplay to distract themselves from negative emotions or to enhance their emotional states, while games may also provide comparatively safe environments for exploring or expressing emotions [50].

Mood management, by contrast, originates from media psychology and refers to the selective use of media to maintain or improve a general affective state [89]. Mood management typically emphasises hedonic regulation and short-term affective optimisation, such as reducing boredom, alleviating stress, or sustaining positive mood states [70, 87]. Within gaming contexts, this may involve choosing calming games to unwind after work or fast-paced games to increase stimulation. Although mood management and emotion regulation overlap, mood management generally concerns broad affective states and media selection processes, whereas emotion regulation encompasses a wider range of emotional processes, including responses that are not necessarily hedonic or mood-repair oriented [39].

Coping differs from these concepts in that it concerns the transactional processes through which individuals appraise and respond to significant stressors; thus, coping is not a static reaction to an event or situation, but a dynamic, shifting dialogue between the person and their environment [33, 53, 61]. In games research, recent work has examined how players engage with games while coping with a range of difficult life circumstances, including bereavement, relationship breakdowns, illness, and periods of existential uncertainty, e.g., [44, 60]. In these contexts, gameplay may support not only temporary emotional relief but also broader processes of adaptation, such as problem-solving and meaning-making. While coping may involve forms of mood management and emotional regulation, it also extends beyond these, focusing on ongoing appraisal and adaptation in response to significant life difficulties. The present study adopts this coping-oriented perspective by investigating how players engage with specific game aspects and experiences in relation to difficult life situations, rather than focusing primarily on transient mood adjustment or shorter-term affective repair.

2.2 Theoretical Foundations of Coping and Digital Play

The Transactional Model of Stress and Coping, developed by Lazarus and Folkman [53] and further elaborated by Park and Folkman [61], provides a foundational framework for understanding how individuals appraise and respond to stress. Within this model, coping is conceptualised as a dynamic, ongoing process shaped by cognitive appraisal and reappraisal. A key distinction is made between problem-focused coping, which involves efforts to alter the stressor through planning, information-seeking, or direct action, and emotion-focused coping, which aims to regulate the emotional distress associated with the situation. Subsequent work has expanded these categories to include avoidance coping, in which individuals disengage from or delay confronting the stressor, and meaning-focused coping, which emphasises interpretation, sense-making and positive reappraisal in difficult circumstances [15, 27, 33].

However, coping is a complex process, and Skinner et al. [74] have criticised prior models for oversimplifying its dynamic nature. The Coping Circumplex Model (CCM) proposed by Stanisławski [79] offers a more integrative perspective of coping by organising responses within a circumplex structure defined around two dimensions: problem coping and emotion coping. These capture a range of coping styles, including problem solving, efficiency, preoccupation with the problem, positive and negative emotional coping, helplessness, problem avoidance, and hedonic disengagement. The CCM aims to illustrate how individuals can navigate between different coping styles and the diverse range of strategies available to them. While the CCM effectively captures the transitions between coping styles, it does not explicitly include meaning-focused coping as a primary strategy.

These models provide an important starting point for understanding coping, but they offer limited guidance on how specific aspects of video games may actively support or shape coping processes. In particular, they do not sufficiently explain how aspects such as game systems, mechanics, and narratives function as resources that players draw upon in moments of difficulty, nor how these resources may facilitate different coping mechanisms. Addressing this gap requires moving beyond categorising coping strategies to investigating how coping is shaped by situated interactions with games. Thus, the present study seeks to develop a more contextual understanding of how different aspects of video games influence coping during periods of difficulty.

2.3 Game Aspects, Coping Mechanisms and Cross-Game Comparisons

Prior research suggests several ways in which games support coping, e.g., play may provide respite, support emotional processing, offer distraction, foster social connection, and facilitate personal reflection [8, 13, 44, 73]. Emotion-based coping has been shown to have both positive effects e.g., when gaming offers a much-needed break [44], whilst avoidance coping has been linked to

problematic gaming [59, 73]. In addition, there has been growing interest in meaning-making coping, which can involve personal growth and reconstructing personal narratives through self-reflection and emotional processing [28, 44, 66, 80]. What is less well explored is the mechanisms by which games are able to facilitate these different forms of coping.

In this paper, *Game Aspects* refers to recurring design and experiential features, such as narrative structure, exploration, interaction with characters, and progression, that shape how a game is engaged with and interpreted. These aspects may interact differently across games, making it important to move beyond genre labels and to understand how specific game features support coping in practice. Prior work by Mirhadi et al. [60] identified 31 game aspects across six categories associated with coping, including Challenge, Narrative, and Simulation of Real-World Activities, and showed how these aspects may support different coping strategies. Notably, Challenge aspects were linked to emotion-focused coping, Game Environment aspects to avoidance coping, and Narrative aspects linked to meaning-focused coping. However, this work was primarily exploratory and based on identifying associations between game aspects and coping strategies, offering limited insight into how these processes unfold in situated play. As such, more in-depth, comparative qualitative research is needed to understand how different configurations of game elements shape players' lived experiences of coping across contexts.

Research in HCI and games has suggested how different games, and potentially associated game elements, may facilitate wellbeing in distinct ways. Routine-based simulation games such as *Animal Crossing* have been shown to foster stability, a sense of achievement, and social connection [19, 55]. In contrast, highly challenging games such as *Dark Souls* cultivate resilience by requiring repeated adaptation and persistence in the face of failure [63, 83]. Similarly, games with strong narrative or reflective elements may support meaning-making and self-examination, as seen in work on *Spiritfarer* and *Disco Elysium* [28, 29, 48].

Prior research has also shown that comparing multiple games can be productive for identifying how particular design features shape player experience in different ways. Research on eudaimonic game experiences has compared games to understand how elements such as narrative engagement, player choice, interface design, and audiovisual presentation influence emotional depth and reflection [24]. Similarly, work on uncomfortable interactions in *Darkest Dungeon*, *Fallout 4*, and *Papers, Please* demonstrated that games can elicit discomfort through difficult decisions and uncertainty, while supporting richer forms of engagement and reflection [38]. Research on psychological horror games has also employed cross-game comparisons to examine how discomfort and narrative techniques in *Alan Wake 2*, *Senua's Saga: Hellblade II*, and *Silent Hill 2* encourage reflection on mental health through gameplay [65, 81]. Rather than assuming that coping is tied to a single game type or broad associations, comparing across different games would enable a deeper understanding of which coping mechanisms are shared, which are game-specific, and how different combinations of game aspects may support coping in distinct ways.

2.4 The Present Study

Growing research points to a gap in understanding how games influence coping. Studies of gaming during difficult life experiences suggest that video games can facilitate meaning-making, emotional processing, and social support, while also serving as a form of avoidance or escapism [44, 59, 60, 73]. Exploratory work on game aspects has also linked challenge, narrative, and simulation elements to distinct coping strategies [60]. What remains underexplored is how these coping processes unfold across different games and how specific aspects of games shape them.

To address the need for in-depth exploration of the processes underlying coping through games during times of difficulty, we explore how and why certain coping mechanisms develop through players' lived experiences across three game titles. Using Constructivist Grounded Theory, we

develop a contextual account of coping that moves beyond static survey data and incorporates players' situated interpretations of play. Building on the analysis, we propose the *Games as Dynamic Coping Systems* model, which views coping as a dynamic, recursive process shaped by interactions between players, specific game aspects, coping mechanisms, and the outcomes that subsequently inform future play and coping. Two central questions guide our research:

(1) **How do different aspects of video games influence coping during personal difficulties?**
(2) **How do these influences vary across different types of games?**

3 Methods

The research adopts a social constructivist perspective, recognising that knowledge is co-created through interactions influenced by unique social and cultural contexts, as outlined in Charmaz's CGT [16]. The first author, with a background in positive psychology and personal experience with gaming during burnout, conducted both data collection and analysis, leveraging their in-group status to build rapport with participants during interviews. Rigorous reflexive practices were implemented throughout by the primary researcher, including a reflexive log, iterative memos, and regular meetings with the wider research team to ensure findings were grounded in participants' lived experiences. The research team are all HCI researchers from diverse cultural backgrounds who currently live and work in Europe. All authors also have personal experience in using games during periods of personal difficulty.

3.1 Game Choice

The study focused on three commercially successful games: *Disco Elysium*, *Darkest Dungeon*, and *Stardew Valley*, chosen for their representation of distinct game types. Specifically, these games encompass a diverse range of core game aspects identified by Mirhadi et al. [60], particularly Challenge, Narrative, and Simulation of Activities. The selection criteria also emphasised the researcher's familiarity with the games, thereby aiding understanding of players' experiences. There was also a deliberate decision to focus on single-player games, and, in the case of *Stardew Valley*, on the single-player mode, stemming from a desire to explore the individual player engagement and the distinctive coping experiences associated with these gaming contexts.

Disco Elysium [88] is a narrative RPG in which players control Harry Du Bois, an amnesiac detective investigating a murder in Revachol. Partnering with Kim Kitsuragi, players shape the story through skill checks and dialogue choices. Features include a Skill Check System with 24 skills that influence dialogue, and a Thought Cabinet that internalises thoughts, granting buffs or nerfs to skills. Chosen for its emphasis on Narrative, research on *Disco Elysium* has highlighted the game's themes around mental health and existentialism [75], whilst showing that it can encourage players to reflect on life stories [48] and impact players' sense of agency [6].

Darkest Dungeon [68] is a Gothic horror Roguelike in which players manage heroes' physical and mental health during dungeon exploration. The Stress System causes heroes to gain stress points (0-200) through combat and encountering horrors and monsters. At 100 stress, heroes develop negative quirks, like Hopeless, or positive traits, like Vigorous. Players recruit, upgrade hero classes, and manage campfire interactions. Chosen for its Challenge aspects, the game provides a context that Gowler and Iacovides [38] demonstrates creates discomfort through challenge, with the potential to prompt reflection, whilst Cartlidge [14] explains how in-game mechanics, including Affliction and Virtue, teach players about human stress responses in adverse situations.

Stardew Valley [2] players inherit and restore a farm, becoming part of the Pelican Town community. Players can build relationships with 28 Non-Player Characters (NPC) through gift-giving

and shared activities. The game features a daily cycle and seasonal festivals, such as Spirit's Eve, which serve as milestones throughout the seasons, whilst environmental customisation allows for personalised farm layouts. Chosen for its Simulation aspects, research indicates that playing *Stardew Valley* can help establish a daily routine, especially during stressful times, including the COVID-19 lockdowns [3]. Many players have also reported using the game to cope with personal difficulties, such as mental health challenges and unemployment [54, 64, 77].

3.2 Data Generation

Initial recruitment focused on purposive sampling to identify players who had experienced personal difficulties while playing at least one of the selected games. Recruitment began on social media platforms (Twitter, Discord, LinkedIn) and gaming communities (Reddit), inviting individuals who played *Stardew Valley*, *Disco Elysium*, or *Darkest Dungeon* during challenging times in their lives. Participants were directed to an online Qualtrics survey that included information about the study and a consent form. After providing informed consent, participants completed a demographic questionnaire about their gaming habits and personal difficulties. The initial sample included 86 respondents; 10 participants were selected for a subsequent semi-structured interview to ensure even representation of games and demographics.

After conducting and analysing the first 10 interviews, theoretical sampling was used to recruit 7 additional participants to deepen the development and iteration of the categories and to enhance the co-construction of meaning from the data. Particular attention was given to negative cases, real-life responsibilities, and participants' articulation of how lessons and reflections from their gameplay experience impacted their real-life situations, bringing the total sample to 17.

Participants' ages ranged from 20 to 35 years, with a mean of 26.1 years. The sample included five women, eight men, two non-binary individuals, and two who self-identified (one as Trans-masculine nonbinary and the other as Transfeminine). They were from the UK (8), USA (7), and Canada (2), with game distribution as follows: *Disco Elysium* (6), *Darkest Dungeon* (8), and *Stardew Valley* (8). Note that some players played more than one game. Interviews revealed experiences with various personal challenges, including mental health issues, grief, relationship breakdowns, and career changes. These challenges were organised using an adaptation of the Major Life Events Taxonomy [41] to provide context without requiring detailed disclosures. Table 1 summarises the game choices and personal difficulties.

3.3 Procedure

Ethical approval was obtained from the University Ethics Committee, and several measures were taken to ensure ethical conduct throughout the study. Participants were fully informed about the purpose of the research, the voluntary nature of their participation, and their right to withdraw at any time. Informed consent was obtained from all participants before their inclusion in the study. Anonymity and confidentiality were maintained by pseudonymising all research materials and by securely storing data.

Data were collected through semi-structured interviews conducted via Zoom, lasting 25 to 55 minutes. Before the interview, participants were asked to review the information sheet and consent form. All participants were compensated with a 10 USD Amazon Gift Voucher (or equivalent) for participating in the study.

The interview script aimed to explore participants' motivations for engaging with specific games, their in-game experiences, how they understood and interacted with game aspects to shape coping, and their reflections on these experiences. Questions included:

- *In what ways did playing (X game) help you cope with your difficulties?'*

Table 1. Participants' Game Choices and Personal Difficulties

Participant	Game Choice(s)	Personal Difficulties
P1	*Disco Elysium*, *Darkest Dungeon*	Mental Health and Wellbeing, Education, Identity, Societal
P2	*Stardew Valley*	Mental Health and Wellbeing, Grief, Education
P3	*Darkest Dungeon*, *Stardew Valley*	Mental Health and Wellbeing, Career, Societal
P4	*Stardew Valley*	Relationship
P5	*Disco Elysium*	Mental Health and Wellbeing, Career, Identity
P6	*Darkest Dungeon*	Mental Health and Wellbeing, Relationship
P7	*Disco Elysium*, *Stardew Valley*	Career
P8	*Disco Elysium*	Mental Health and Wellbeing, Relationship, Career, Education
P9	*Darkest Dungeon*	Mental Health and Wellbeing, Grief, Physical Health
P10	*Stardew Valley*	Grief
P11	*Darkest Dungeon*	Career, Relationship, Grief
P12	*Stardew Valley*	Relationship
P13	*Stardew Valley*	Mental Health and Wellbeing, Relationship, Physical Health, Identity
P14	*Disco Elysium*, *Darkest Dungeon*	Career, Physical Health
P15	*Disco Elysium*, *Darkest Dungeon*	Mental Health and Wellbeing, Relationship, Grief, Physical Health
P16	*Darkest Dungeon*	Mental Health and Wellbeing, Relationship, Career, Physical Health
P17	*Darkest Dungeon*, *Stardew Valley*	Education, Societal

- *Since playing (X game), have you noticed any changes in how you handle real-life challenges?*

In a CGT study, interview questions may be iteratively revised to refine the developing theory, enabling deeper exploration of categories and participants' interpretations. Within the study, revisions were informed by theoretical sampling, which involved recruiting new participants to explore adverse outcomes, balance gaming and real-life responsibilities, compare different games, and explore how gaming experiences may have had real-life applications. Additional questions included:

- *Can you think of a time when playing didn't help or perhaps made you feel worse?*
- *Can you describe a time when gaming interfered with your real-life responsibilities?*
- *How do the different games (Disco Elysium, Darkest Dungeon, Stardew Valley) compare in helping you cope?*
- *Can you recall a time when you applied a skill or insight learned from (X game) to overcome a personal challenge?*

The interview script is available in the supplementary materials.

3.4 Data Analysis

All interviews were audio-recorded and transcribed via Zoom, with the primary researcher checking transcripts against recordings for accuracy. Data analysis followed CGT principles [4, 16, 20, 21], with data generation and analysis conducted concurrently. Analysis involved iterative stages of initial, focused, and theoretical coding, supported by constant comparison and memo writing. These steps were recursive, cycling between coding, comparison, and category development to shape the

model from the data. Theoretical sampling guided data generation until theoretical sufficiency was reached. MAXQDA 24 facilitated data management, coding, memoing, and comparison.

Initial coding began with the first phase of ten interviews, with each game analysed individually before comparisons were made across the games. Line-by-line coding was conducted to remain grounded in participants' meanings, actions, and experiences, generating provisional codes that reflected variation within and across interviews. Constant comparison was applied from the outset, comparing data within and between participants across the three games. Early comparisons explored how game aspects interacted and how players described their influence on coping, while memos documented initial ideas, questions, and connections between game aspects and coping mechanisms.

Focused coding involved selecting and developing the most analytically significant initial codes through two iterative rounds. First, codes were grouped within each game to preserve contextual sensitivity. Second, cross-game comparisons refined these groupings into more abstract categories. Constant comparison informed decisions to merge, differentiate, and define categories, while memos elaborated on their properties, boundaries, and relationships.

Through this process, codes were developed to capture how the player interacted with specific game aspects to influence coping. These were organised into provisional categories comprising eight game aspects and seven coping mechanisms, as shown in Table 2. Categories were treated as interpretive and provisional, refined through ongoing comparison and memo writing, providing an audit trail of analytic decisions that led to the construction of the grounded theory model.

Table 2. Provisional Categories

Game Aspect Categories	**Coping Mechanisms**
Narrative Depth and Emotional Engagement	Emotional Processing
Choice and Consequence	Cognitive Restructuring
Immersive World Building	Controlled Escapism
Character Growth and Social Interaction	Personal Growth
Challenge and Progression	Stress Management
Customisation and Identity Exploration	Routine Establishment
Routine Establishment and Gameplay Structure	Creative Expression
Emotional Resonance	

Theoretical sampling was used to extend and refine the analysis. In the second phase, three participants were recruited to explore potential adverse outcomes and the balance between gaming and real-life responsibilities. New data were iteratively coded and compared with existing accounts, prompting refinements to codes and the development of new categories. For example, Emotional Resonance was consolidated with Emotionally Engaging Narrative; Routine Establishment was reframed as Structured Gameplay; Creative Expression was removed due to limited support; and Controlled Escapism was reconceptualised as Immersive Respite. These revisions were grounded in repeated comparison and documented in memos to ensure analytic transparency.

Through these iterative cycles, categories were further refined into seven game aspects and six coping mechanisms, characterised by specific conditions, interactions, and properties, as shown in Table 3. The cycles also strengthened the grounded theory model by offering new insights that complemented, challenged, or expanded previous interpretations grounded in comparison, memos, and theoretical sampling.

In the third phase, four participants with experience across multiple games were recruited and interviewed to deepen cross-game and contextual comparisons. Their insights helped refine

Table 3. Refinement of Categories

Game Aspect Categories	**Coping Mechanisms**
Emotionally Engaging Narrative	Emotional Processing
Choice and Consequence	Cognitive Restructuring
Immersive World Design	Immersive Respite
Character Development and NPC Interactions	Personal Growth
Challenge and Progression	Sense of Accomplishment
Structured Gameplay	Stress Management
Environment Customisation	

category relationships, including removing Environment Customisation and integrating Stress Management with Cognitive Restructuring.

Theoretical coding focused on specifying relationships and interactions between categories and integrating them into a coherent explanatory model. Constant comparison and memo writing supported the development of conceptual links between game aspects and coping mechanisms, and between coping mechanisms and coping outcomes, and documented the evolving analytic structure. Theoretical sufficiency [12, 16, 26] was reached when additional data and analysis provided sufficient conceptual depth to support explanations of coping mechanisms and game aspects while refining existing categories and their relationships. Consistent with a constructivist epistemology, this was regarded as an interpretive and pragmatic judgement, acknowledging the analysis as a context-dependent construction.

The final phase involved integrating categories into the *Games as Dynamic Coping Systems* model, with final refinements clarifying category definitions and relationships. For example, Emotionally Engaging Narrative was changed to Narrative to focus purely on the game aspect, rather than incorporating player responses to the narrative after interacting with the game.

The final six **Game Aspects** categories are:

(1) Challenge and Progression
(2) Character Development and NPC Interactions
(3) Choice and Consequence
(4) Narrative
(5) Game Environment
(6) Structured Gameplay

Five **Coping Mechanisms** were also constructed:

(1) Processing Emotions
(2) Reframing Thoughts
(3) Developing Self Understanding
(4) Seeking Temporary Refuge
(5) Building Competence

These final categories are discussed further below in relation to the model of *Games as Dynamic Coping Systems*.

4 Results

The results present the grounded theory of *Games as Dynamic Coping Systems* which explores how individuals navigating personal difficulties develop coping through engagement with video games. Rather than purely cataloguing game aspects and coping mechanisms, the analysis traces how players' interactions with specific game aspects shape the development of coping mechanisms,

and how different games configure this relationship in distinct ways. The section first introduces the conceptual model, then unpacks each of its components and relationships, using participants' accounts to show how coping is dynamically constructed through play. A visualisation of the model is presented in Figure 1.

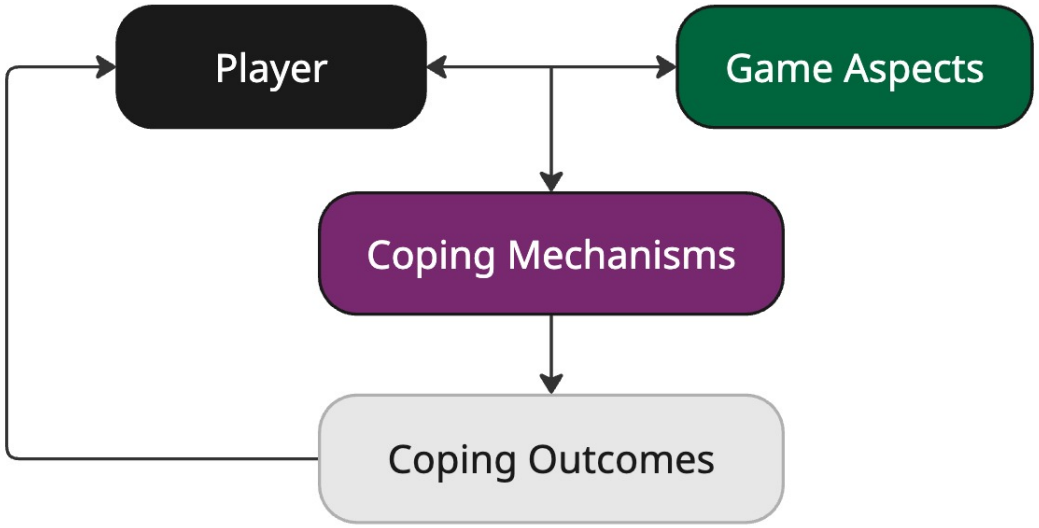


Fig. 1. Games as Dynamic Coping Systems model

4.1 The Games as Dynamic Coping Systems Model

The theory was developed through a constructivist grounded theory approach that examined player experiences across three games: *Disco Elysium*, *Darkest Dungeon* and *Stardew Valley*. Figure 1 depicts the model's four interconnected components: **Player**, **Game Aspects**, **Coping Mechanisms**, and **Coping Outcomes**. The model views coping through games as a dynamic, recursive process involving these elements and their interactions: (1) the interaction between players and game aspects that influences coping, and (2) how coping mechanisms lead to coping outcomes that then feed back into the player, shaping future gaming and coping behaviours.

The core premise is that coping does not reside in the game or the player alone, but develops through their ongoing interaction. Players bring their personal experiences, needs and skills into gaming, while games offer specific mechanics, narratives and structures. At the heart of the model is the dynamic between what players bring to the gaming experience (e.g., life circumstances, emotional needs, prior experiences, and skills) and what the game offers (e.g, challenges, progression, routines, and narratives). These interactions create opportunities for coping, allowing players to develop and refine mechanisms such as Developing Self Understanding. Coping Outcomes, such as relief or increased efficacy, serve as feedback that can influence the player's wellbeing, disrupting or reinforcing existing coping patterns and shaping future game choices and engagement.

The following sections unpack each component of the model and its relationships, showing how participants' accounts informed and elaborated the conceptual model.

4.2 Player

The Player is a central component of the model, encompassing their specific personal difficulties, lived experiences, needs, and skills, all of which shape how individuals engage with games as potential coping resources. Rather than treating players as passive recipients of game content, the model foregrounds how they bring their personal contexts into gaming, shaping why they play and how they interact with particular game aspects, thereby influencing their coping mechanisms.

Participants were navigating a range of personal difficulties as shown in Table 1, including mental health difficulties e.g., where they experienced *"intrusive thoughts"* (P1) or how having anxiety meant they had a *"desire to try to cover for all failure cases"* in their lives (P3), while others were dealing with external events such as the death of a close friend which *"caused a big upheaval"* (P15). These circumstances shaped when and how they turned to particular games, which titles they selected, and what kinds of support they hoped play would provide.

Variation in needs and contexts led to distinct motivations and forms of engagement. For instance, some participants sought games that demanded sustained focus and strategic thinking, using demanding gameplay and high-stakes decision-making to experience a sense of control.

> *It helped me reflect on my personal decision, gave me a sense of control, allowed me to strategize, overcome some challenges. (P16)*

Others chose games that offered escapism and disengagement, describing play as a temporary refuge where difficult emotions could be held at bay during periods of isolation or grief. P7 described how playing video games enabled a form of psychological distancing:

> *It helped me forget about the memories of my mom. Each time I'm thinking about her, I'll just decide to play the game, because of the excitement and emotions I'm having. I'll just forget about everything. (P7)*

Players also actively interpreted their interactions with game systems, characters, and narratives. For some, in-game relationships and character arcs became a way to reflect on themes of connection, belonging, and care in their own lives:

> *Building relationships and helping one another is quite necessary. Respecting whether you know or don't know the person or not. So love whoever you see, and then build a relationship with them. (P2)*

For others, broader contextual conditions such as the COVID-19 pandemic shaped how they engaged with games and how they read their narrative worlds as spaces for making sense of uncertainty and social disruption, as seen in this example from Disco Elysium:

> *There was a lot of bad that came out of those several years [...] We're throwing away several years of our life and weren't gonna really be able to get things back on track. I think playing through Disco Elysium made me at least start recontextualising it a little bit. (P1)*

These examples highlight the Player component as a multi-faceted element in the *Games as Dynamic Coping Systems* model. Players' circumstances and past experiences influence engagement and interactions with Game Aspects, shaping their adoption, interpretation, and development of coping mechanisms.

4.3 Game Aspects

Game aspects are the specific design elements within a game that structure how coping opportunities can develop for players, forming the *Game Aspects* component of the model and defining the affordances through which coping opportunities become available when players engage with particular games. The analysis developed six conceptual categories of game aspects that capture

how participants engaged with the three games in this study. An expanded overview of these categories, their definitions, and examples of game elements specific to each title is provided in the supplementary materials. Although presented as distinct categories for analytical clarity, participants did not experience these aspects in isolation. They described overlapping interactions among multiple aspects, with coping mechanisms being developed from their combined effects.

4.3.1 Challenge and Progression. Structured difficulties and progression mechanics encompass elements that create difficulty and opportunities for player advancement. Across the games studied, these included the skill check system, detective work, and character skill trees in *Disco Elysium*; dungeon crawling, resource management, and hero upgrading in *Darkest Dungeon*; and farming skill levels, building upgrades, and farm expansion in *Stardew Valley*. These systems often shaped how players approached coping by giving them a clear focus and a sense of progression. For example, P6 described learning how to navigate different boss fights in *Darkest Dungeon* to progress:

> *[Boss of the Formless Flesh] is 4 mini bosses that share the health bar. I brought in a party that brought debuff mechanics like bleed and poison, because when it applies to one, it applies to all at the same time. I combine that with moves that could hit multiple enemies at the same time and watch the health bar tumble. You start realising that this applies to other bosses; they all have a particular weakness you can exploit. (P6)*

4.3.2 Character Development and NPC Interactions. Features that allow players to build relationships, engage with non-player characters, and reflect on character growth. In *Disco Elysium*, this included the Thought Cabinet, dialogue options and relationships with other characters; in *Darkest Dungeon*, it included hero stress levels, quirks, permadeath, and hero relationships; and in *Stardew Valley*, it included building relationships with community members through conversation and event participation. These interactions often became important spaces for reflection and emotional connection. In *Disco Elysium*, P15 described how the interactions between characters prompted reflection on personal relationships:

> *When Kim gets shot, that whole thing warped my thinking about what my current friendships look like. Kim is doing his best and jumps and takes a bullet [for Harry]. I know Kim and Harry weren't involved in each other's lives before they met. But that whole act made me think about what my friendships are like, and I wish my friends were more present sometimes. (P15)*

4.3.3 Choice and Consequence. Decision-making systems through which players can explore different perspectives, identities and outcomes within the game world. In *Disco Elysium*, these included branching choices, internalising different ideologies, and skill checks; in *Darkest Dungeon*, party composition and stress management shaped dungeon success and hero behaviour; and in *Stardew Valley*, choices about farm layouts and gifting preferences affected relationships and progression. These elements allowed participants to explore different in-game choices that felt meaningful yet low-stakes. For instance, one participant described using a choice in *Disco Elysium* to reflect on aspects of their own identity:

> *I had to choose whether my character was a feminist or not [laughter], and it struck me how naturally I was drawn to that kind of thing. These are traits I believe in, but I don't see. So I click on that option and all of a sudden, now I'm a feminist. I've been questioning myself for a long time, and I found it interesting that it was so naturally given to me. (P5)*

4.3.4 Game Environment. The visual, auditory, and immersive worlds offer temporary refuge from real-world stressors, providing mental breathing room, e.g., *Disco Elysium*'s distinct art style and

music to *Darkest Dungeon*'s gothic visuals and *Stardew Valley*'s calming seasonal changes. P13 demonstrate how the aesthetics in *Stardew Valley* impacted their wellbeing:

> *Nothing changes unless I actively change something, and I find that playing it, with the combination of music, colours, and stuff, especially during autumn and winter, it's like the game allows me to slow down. (P13)*

4.3.5 Narrative. Rich storylines, arcs and thematic content provide a safe distance for players to explore and process complex emotions, e.g., the protagonist's alcoholism in *Disco Elysium*, hero backstories in *Darkest Dungeon*, and NPC struggles like Shane's depression in *Stardew Valley*. For example, P1 elaborates about how *Disco Elysium* explores complex themes as a means of introspection:

> *It's a game about a broken man, but I think more than that, it's a game about fixing a broken man or a broken man learning to fix himself in a way. [...] I'm not an ex-cop drunkard who got divorced and can't cope, and has given myself horrendous blackout drunk, induced amnesia and if he can still put himself back together like, I should be okay. (P1)*

4.3.6 Structured Gameplay. Predictable routines and gentle pacing foster a sense of competence, which can be beneficial when real life feels chaotic or overwhelming, e.g., dialogue trees and skill checks in *Disco Elysium*, time-gated activities and boss battles in *Darkest Dungeon*, and farming activities and town events in *Stardew Valley*. P13 breaks down how they approach an in-game task in *Stardew Valley* and how the game structures tasks and goals:

> *I really want to get like, I don't know, a silo, and it breaks things down really easily. I have to tend the crops to make the money, then get the resources to build it, and it's lots of repetitive tasks that are very familiar with that end reward goal, structured and manageable. (P13)*

4.4 Interactions Between the Player and Game Aspects

While different games emphasise different aspects and configurations, it is the interaction between Player and Game Aspects that creates opportunities for coping. Players do not encounter game features uniformly; rather, they engage with aspects that resonate with their current needs, circumstances, and past experiences. The game provides specific affordances, while the player adds their own context and meanings to gameplay, informing different coping mechanisms (see Section 4.4). For example, P14 explained that managing resources and keeping a healthy party in *Darkest Dungeon* helped them overcome challenges, and how certain game aspects might align with their own needs:

> *I learned a lot about resource management because we have limited food, torches, and medical supplies to keep the heroes alive and healthy. I saw my ability to cope with difficulties and emotional resilience through experiencing and overcoming traumatic events in the game. [...] Even when things seem bleak, it actually looks as if there's no way out, but I found hope, I found perseverance. (P14)*

In another example, P1 reflected on how reinterpreting in-game mechanics in *Disco Elysium* functioned as a metaphor for moments of anxiety. Here, the game's skill check system became more than a gameplay mechanic; it provided an avenue through which the participant could make sense of their own emotional experience:

> *I have a lot of health anxiety and get really anxious and then go, oh no, I succeeded my halflight check, why did I do that? I then brush it off as a video game mechanic in a way that would let me distance myself from really unhelpful fears. (P1)*

P1 further elaborates on the Thought Cabinet mechanic in *Disco Elysium*, drawing a parallel between personal struggles and the game's depiction of learning:

> *You can intentionally take a penalty [to learn a skill] by thinking about how sad you are for 18 hours. But then you realise that there was something good that came out of it afterwards. [...] It made me feel like I could stick it out or get a little more control over my thoughts. I wish I could slot in the different thoughts that I need at any moment. (P1)*

These examples demonstrate that coping mechanisms develop through the *interaction* between players' situated context and specific game aspects. This relationship is central to the *Games as Dynamic Coping Systems* model, as it clarifies how certain configurations and interactions foster the development of coping mechanisms.

4.5 Coping Mechanisms

Coping Mechanisms do not develop in isolation, nor are they experienced universally by all players; rather, they are constructed through dynamic interactions between players and specific aspects of the game. Five coping mechanisms were constructed from participants' accounts, each supported by one or more aspects across the three games. These mechanisms illustrate how players draw on games to interpret and navigate their situations during tough times, and how the same game aspects can be adapted differently depending on players' needs and contexts.

4.5.1 Processing Emotions. Involves engaging with games to explore, understand, and work through complex emotions related to difficult life experiences. Players found parallels between in-game scenarios and their difficulties, which helps them engage with emotions such as grief, anxiety, or trauma in a structured way. The mechanism focuses on how various gaming experiences may serve as a medium for emotional reflection and processing. Thus, gaming can serve as a valuable tool for emotional exploration and management during these periods, as one participant noted when describing their experience of playing *Disco Elysium* during a break-up:

> *It made me feel a lot of ways, a roller coaster of emotions. Predominantly, my intellectual interest was piqued because it reminded me of the days I had with my ex-boyfriend. It was a very emotionally taxing game, from the romantic aspects of it to the grand world aspect of it. [...] A metaphor for what's happening in real life. (P15)*

4.5.2 Reframing Thoughts. Relates to how players leverage their gaming experiences to reframe and transform negative thought patterns that arise in challenging life situations. The mechanism demonstrates how gaming can enable players to gain insights that address real-world challenges. The findings indicated that players gain new perspectives on problems, recognise when their approaches to personal challenges are ineffective, and develop alternative perspectives. By learning to prioritise and make tough choices under pressure in games, players may also consciously apply these skills to the complexities of their personal lives, fostering a more resilient approach to adversity. The quote from P3 illustrates how the in-game challenges prompted a conscious effort to overcome detrimental behaviours, such as the habit of 'covering all potential failure cases':

> *I wanted to make it so nothing bad ever happened. Playing* Darkest Dungeon *actively forced me to continue engaging with it, actively forced me to try to overcome some of those habits. In a way that I do believe was a catalyst for applying that to other places in my life. (P3)*

4.5.3 Seeking Temporary Refuge. Focuses on how players deliberately engage with gaming as a structured, temporary means of disengagement from real-world stressors through immersive

gameplay. This coping mechanism offers mental relief and cognitive diversion, helping players return to their challenges with renewed capacity, as seen in this example from *Stardew Valley*:

> *I find every single time I play, it's a really good way to just kind of like it quiets my brain, and there's always something, some task that I can focus on in the game. I think it's a combination of the music, the tasks, and that kind of slow progression as well. (P13)*

However, while this mechanism can be beneficial, there is a cautionary note about the potential for over-reliance on gaming as a coping mechanism. For example, the quote below (also regarding *Stardew Valley*) illustrates how the same mechanism can become excessive and potentially lead to harmful detachment:

> *Sometimes I'll play the whole day, and based on my work schedule and everything, I skip some activities, like meeting with friends instead of going out with them. I have someone in the house talking to me, which is my phone, my game. So I skip some daily activities and play the game. (P12)*

4.5.4 Developing Self Understanding. Emphasise how reflecting on gameplay experiences leads to deeper insights into oneself and one's position in difficult life circumstances. The coping mechanism involves consciously transferring insights, social skills, and self-awareness gained through gameplay to comparable real-life challenges. This process enables players to develop new perspectives and enhance their ability to navigate challenging life circumstances by reflecting on how gameplay can help them foster better connections or develop an understanding of self-care mechanisms, as seen in these examples from *Darkest Dungeon*:

> *I tried to do one mission on one mission off. It's almost like telling yourself that it's okay to step back. It's okay to take a break. Remove yourself from a situation until you're ready to face it again. (P6)*

4.5.5 Building Competence. Relating to the process of seeking and engaging in activities that provide a sense of achievement, capability, and purpose during periods of personal difficulty. The coping mechanism helps individuals counter feelings of helplessness or stagnation by focusing on tasks or challenges that offer opportunities for accomplishment and recognition and using structured activities to restore a sense of efficacy and emotional reinforcement. P3 illustrates how they found comfort in the unpredictability of *Darkest Dungeon*, knowing there were manageable tasks within the game that they could focus on:

> *Knowing that there was something in my life that I could do on a smaller scale, even though I still couldn't control when things randomly went bad while playing. I understood on some level the variables of the decisions I was making, and there was actively a reward that I was working towards for navigating that situation. (P3)*

These five coping mechanisms show how participants used gameplay as a versatile coping resource during personal struggles. They also demonstrate how games serve as structured settings for players to interpret circumstances, explore new perspectives, and regain control when facing real-world challenges. An overview of the main influencing game aspects for each coping mechanism is shown in Table 4.

P15's account further illustrates how these mechanisms can co-occur and shift within a single game. Influenced by *Disco Elysium*, P15 described how the in-game dialogue became a caricature of real life, opening space to explore identity, relationships, and past friendship challenges through the coping mechanisms of Processing Emotions and Developing Self-Understanding.

> *I had my own little electrochemistry demon on my shoulder, telling me what to say. I really like that these are just completely illegal things to say in a normal conversation. It*

Table 4. Coping Mechanisms and Influencing Game Aspects

Coping Mechanism	Influencing Game Aspects
Processing Emotions	Narrative Character Development and NPC Interactions
Reframing Thoughts	Challenge and Progression Choice and Consequence
Seeking Temporary Refuge	Game Environment Structured Gameplay
Developing Self Understanding	Choice and Consequence Character Development and NPC Interactions
Building Competence	Challenge and Progression Structured Gameplay

> *made me laugh at the absurdity of it, of this clearly over the top written character that's supposed to be disliked, actually doing a positive for me. (P15)*

At the same time, P15 recognised that drawing close parallels between the game and their own life could become unhelpful, and chose to step back when the overlap with real-life difficulties felt too pronounced:

> *It was starting to slip into my daily life. The electrochemistry little devil on my shoulder was telling Harry [in the game] let's not. My brain was also making a little 3-way connection of electrochemistry, and I was like I can't do this anymore, I'm too suggestible. My brain latches onto things, and we'll take it on very quickly. This cannot be a thing that we can take into regular daily life. (P15)*

P15's accounts further demonstrate how a specific game aspect can facilitate helpful coping mechanisms while also exposing its limitations and negative effects, as engagement mirrors real-world stresses, thereby influencing the resulting coping outcomes.

4.6 Coping Outcomes and the Feedback Loop

The final component of the model, **Coping Outcomes**, refers to the emotional and behavioural effects of coping on players. Across participants' accounts, players reflected on how they felt during and after gameplay, how they interpreted their situations, and how they approached games and challenges moving forward. These insights form the *Coping Outcomes* component of the model, providing feedback that can strengthen or challenge players' current coping methods and shape their ongoing interactions and their future engagement with games. While often beneficial, these outcomes are not uniformly positive; they are contingent on alignment among the Player, Game Aspects, and Coping Mechanisms. While participants experienced emotional relief and personal insight, they also sometimes faced frustration and disappointment when game content clashed with their needs or values, or when they found themselves playing too much.

Across all three games, participants highlighted both short-term regulatory and longer-term psychological growth effects. Games offered temporary escape and gentle emotional regulation, particularly in *Stardew Valley*, while *Disco Elysium* provided rich narratives for exploring complex themes, and *Darkest Dungeon* fostered a sense of competence and self-efficacy through overcoming difficult challenges.

For instance, P7 described how playing *Disco Elysium* alongside *Stardew Valley* after a period of isolation provided emotional relief and fostered personal growth, reinforcing their perception of games as a source of hope during adversity:

> *These games really help me cope in a way that I was able to put all those emotions in control after playing. When my emotions are calm, I'll be able to sit down and think about what to do next with my life. [...] It helped me forget my pain and emotions, and gave me the courage to look forward and become a better person. (P7)*

Similarly, overcoming the punishing mechanics of *Darkest Dungeon* boosted feelings of self-efficacy, encouraging participants to reflect constructively on their own mental health:

> *It's not the end of the world. Okay, it feels pretty bad now, but as I alluded to, it's okay to take a step back. Go put it down for a bit and then come back to it when you've had time to process it. (P6)*

Conversely, when game content closely mirrored or directly conflicted with a participant's emotional state or values, it led to negative outcomes, including frustration, distress, or disengagement. In discussing *Disco Elysium*, P1 reflected how some of the intense themes surrounding death, existentialism and anxiety could exacerbate emotional difficulties, particularly for those managing mental health challenges:

> *I traded the stress of my own life for worrying about a man who had been hanged, which is not necessarily a very great thing to be thinking about. Another major theme of the game is love as a destructive force, which is also not necessarily super helpful to think about. [...] The main character is also very suicidal, very depressed, very anxious and that's really really rough. (P1)*

P1 further elaborated how a specific narrative subplot directly clashed with their core values, souring their view of the game as a viable coping resource:

> *There's an entire subplot where, to get past a bruiser type, you have to literally internalise the concept of racism. A source of frustration for me was that I felt there were certain things I wouldn't know unless I were willing to go against my own morals or engage with aspects of the game I didn't really want to. (P1)*

Beyond narrative content, the behavioural patterns of play posed potential adverse outcomes. Some players reflected on extended gaming sessions where they lost track of time and reflected on using games as an avoidant coping mechanism:

> *Initially, I intended to play for just an hour or two, but I often found myself playing for four or five hours, sometimes completely losing track of time. (P7)*

These varied outcomes do not mark a static final endpoint; instead, they function as a continuous feedback loop that reshapes the Player component and guides subsequent gaming choices. Players reflected on both beneficial and problematic outcomes to adjust which games they played, how they played them, and when they turned to gaming as a coping mechanism.

For P14, playing *Disco Elysium* and *Darkest Dungeon* during a period of career and health instability prompted broader life changes and the seeking of external social support. They also recognised when certain gameplay dynamics became counterproductive to their overall wellbeing:

> Disco Elysium *shows me how to build relationships and the importance of having these relationships and seeking support from others. It helped me to develop a sense of community and connection, which actually bridges the barrier of staying alone, of feeling depressed, of feeling lonely. (P14)*

P14 further elaborated that over-identification with in-game choices led them to re-evaluate the limits of gaming as a form of coping and to switch to *Darkest Dungeon* to better align with their needs at the time:

> *The negative part of [Disco Elysium] was that I think I got addicted to it. I actually got to the point where I tried to solve every real-life issue using the puzzle, trying to play on people's minds and detect how this person reacts to issues. It really got into my mind where I saw that I treat everybody as a suspect. [Darkest Dungeon] helped me manage emotions and prioritise my own needs. (P14)*

Similarly, P6 described how their experiences with *Darkest Dungeon* refined their future gaming preferences, guiding them towards games and mechanics that supported challenge without replicating overwhelming work pressures:

> *You can still make decisions in those games which are nice and make you feel good. But you also realize that from then on, you still have to take that colder approach, which maybe you weren't really doing before then. You realize that the game has changed you, and whether or not you think it's for a good or a bad aspect depends on the person. Once you've done it, you can't undo it. It sticks with you. (P6)*

The model illustrates how *Coping Outcomes* serve as feedback that reshapes the *Player* component and guides subsequent engagement with games. Players reflected on both beneficial and problematic outcomes to recalibrate which games they played, how they played them, and when they turned to games as a coping mechanism during tough times. The model illustrates that coping through gaming is a dynamic system. However, the loop is not infinite; it is naturally interrupted or concluded by external transitions, such as completing a game, shifts in real-world life circumstances, or a conscious transition to alternative games or coping methods.

4.7 Coping Across Games

To further illustrate the *Games as Dynamic Coping Systems* model, this section compares coping across *Disco Elysium*, *Darkest Dungeon*, and *Stardew Valley*. Rather than treating these as isolated case studies, the analysis positions each game as a distinct configuration of *Game Aspects* that, in interaction with the *Player*, shapes the development of different coping mechanisms and outcomes. Table 5 summarises these relationships by showing, for each game, which game aspects primarily influenced particular coping mechanisms.

Table 5. Summary of Coping Mechanisms and Supporting Game Aspects for each Game.

Game	Coping Mechanisms	Supporting Game Aspects
Disco Elysium	Processing Emotions Developing Self Understanding Reframing Thoughts	Narrative Character Development and NPC Interactions Choice and Consequence
Darkest Dungeon	Reframing Thoughts Building Competence Developing Self Understanding	Challenge and Progression Choice and Consequence Structured Gameplay
Stardew Valley	Seeking Temporary Refuge Developing Self Understanding	Game Environment Structured Gameplay Character Development and NPC Interactions

In *Disco Elysium*, a focus on Narrative, Character Development and NPC Interactions, and branching Choice and Consequence created an environment that primarily supported Processing Emotions, Developing Self Understanding, and Reframing Thoughts. Players engaged with complex themes of failure, identity, and relationships, using the game's narrative to mirror, explore, and reinterpret elements of their lived experience:

> *I think the game at its core wants you to absorb all of this and take your own perspective from it. Harry sees all this terrible stuff, but fundamentally it's you the player who chooses how he responds to it, or what parts of it he internalizes and I think in that way that it's a good mirror to life. We will all experience these terrible things, but fundamentally we are the ones guiding how we will react to it and where we will choose to go from it. (P1)*

In comparison, *Darkest Dungeon* emphasised Challenge and Progression, Choice and Consequence, and Structured Gameplay through escalating difficulty, resource management, and stress mechanics. This configuration of game aspects tended to scaffold Reframing Thoughts, Building Competence, and Developing Self Understanding, as participants came to reinterpret setbacks, experiment with strategies under pressure, and practise managing uncertainty and loss:

> *Your characters aren't landing their attacks or damaging each other, all the while the enemies are whittling their health down and how it can snowball from just someone getting a bit angry to a total wipe. Looking at this and thinking, hang on! I've been there, mentally, several times before, and it was almost surreal. You're seeing your own mind or your own mental health playing out on you in front of the screen. (P6)*

By contrast, *Stardew Valley* offered a calming Game Environment, routine-based Structured Gameplay, and low-pressure Character Development and NPC Interactions that fostered Seeking Temporary Refuge and Developing Self Understanding. Participants described using the game's predictable cycles to create pockets of restoration and to reflect on relationships and values within a non-threatening virtual space.

> *It's like the moment the title music starts to play. I can almost feel my breathing slow down a bit. [...] The investment and immersion that it offers me and gives me the time to power down my brain a little bit (P13)*

In all three games, Developing Self Understanding served as a shared coping mechanism. However, it was influenced by various Game Aspects, such as complex narrative themes in *Disco Elysium*, confronting challenges and failure in *Darkest Dungeon*, and routine and social interaction in *Stardew Valley*. Coping mechanisms are not limited to specific games but are constructed from particular Game Aspects that players engage with in their situated contexts.

Some participants also interacted with multiple titles, switching between games as their needs and circumstances changed. As a result of these varied outcomes, players adjusted their engagement with different games, rather than sticking to a single game for all coping purposes. They often compared these choices, noting how each game offered unique coping opportunities and reflecting on their lived experiences. For example, one participant (P15) described how managing relationships and team dynamics in *Darkest Dungeon* prompted reflection on their real-world friendships, supporting the coping mechanism of Reframing Thoughts. By contrast, *Disco Elysium*'s narrative depth enabled them to explore themes such as anxiety and grief more directly, facilitating Processing Emotions.

> *For me, Darkest Dungeon made me consider my friendships and what I truly desire from social interactions, as well as the exploration of different combinations of friends. In contrast, Disco Elysium allowed me to confront my anxieties, depression, and sadness regarding my friends, romantic interests, and my grief over a close friend (P15).*

Similarly, P3 contrasted the demanding, high-stakes progression of *Darkest Dungeon*, which fostered the coping mechanism of Building Competence by overcoming adversity, with the community-oriented world of *Stardew Valley*, which offered comfort and a sense of connection during periods of isolation and Developing Self Understanding.

> *When I come out of a difficult game in [Darkest Dungeon], having accomplished something... it helps me keep hope that there's a reason to persist. [...] In [Stardew Valley], it*

> *made me appreciate people who are just trying to do their best for one another, and exist in a world where it was okay to do what you want. (P3)*

The comparison across the three games illustrates how Game Aspects and Player interactions influence various Coping Mechanisms. These accounts show how players interpret and sometimes compare games to construct meaning. Consequently, coping occurs across different games, with Coping Outcomes influencing future gaming choices, such as moving on to a new game or stopping play. Thus, coping is not a fixed trait of any single game but, as shown in the *Games as Dynamic Coping System* model, involves a dynamic relationship between **Player**, **Game Aspects**, **Coping Mechanisms**, and **Coping Outcomes**.

5 Discussion

The study sought to investigate how different aspects of video games influence coping during personal difficulties and how these influences vary across games. Using a CGT approach that focused on three distinct games, we developed the *Games as Dynamic Coping Systems* model to explain how players' circumstances, prior experiences, and interactions with specific game aspects support different coping mechanisms. The model proposes that coping is not a static trait of the game or the player but a relational process constructed through situated engagement with aspects of the game, which feeds back into subsequent wellbeing and gameplay.

The value of our model lies in moving beyond broad categorisations of coping strategies, building upon exploratory work by Mirhadi et al. [60], to identify five distinct, interconnected mechanisms grounded in the active dynamics of play: Processing Emotions, Reframing Thoughts, Seeking Temporary Refuge, Developing Self Understanding, and Building Competence that are influenced through interactions across six game aspects: Challenge and Progression, Character Development and NPC Interactions, Choice and Consequence, Narrative, Game Environment and Structured Gameplay.

5.1 Theoretical Implications

The *Games as Dynamic Coping Systems* model extends broader psychological and HCI research by showing how the interactive properties of video games can help configure the coping process. First, we build on the traditional transactional models of coping [32, 61] by demonstrating how interactions with specific game aspects influence and reshape a player's subjective appraisal of real-world stressors. Traditional frameworks typically view coping as a sequence of cognitive and behavioural efforts to manage external demands within a relatively static environment. Our model builds on this by illustrating how game aspects, through player interactions, can structure the coping journey itself, particularly for meaning-focused coping, in which individuals re-evaluate and navigate personal adversity.

Second, our findings identified the theoretical boundaries of the Coping Circumplex Model (CCM) [79] when applied to interactive media. The CCM offers a valuable taxonomy for tracking diverse and shifting coping styles. Our data demonstrate how different game affordances facilitate distinct circumplex styles: *Disco Elysium* encourages *Positive Emotional Coping* and *Optimistic Action* through complex narrative navigation; *Darkest Dungeon* drives *Problem Solving* alongside a potential *Preoccupation with Problems* via punitive challenge; and *Stardew Valley* affords *Hedonic Disengagement* and *Positive Emotional Coping* through low-stakes, restorative routines. However, because the CCM is fundamentally organised around traditional problem- and emotion-based dimensions, it lacks explicit consideration of meaning-focused coping. Our model addresses this gap by highlighting meaning-focused coping as a core eudaimonic mechanism through which players navigate adversity.

5.2 How Games Support Different Coping Mechanisms

Our *Games as Dynamic Coping Systems* model demonstrates that coping is neither an innate property of a game nor a fixed trait of a player. Instead, we highlight that coping is a dynamic, situated process co-constructed through interactions between a player's individual circumstances, prior experiences, and specific game aspects, which in turn influence future play and overall wellbeing.

By comparing three distinct games, the study demonstrates that the same broad coping functions are influenced through different mechanisms and game aspects: *Disco Elysium* supported reflective processing and understanding through narrative and choice; *Darkest Dungeon* supported reframing through challenge and repeated failure; and *Stardew Valley* supported temporary refuge and restoration through structured, low-pressure play. The focus on how configurations of game aspects influence coping builds on recent findings into how game systems support psychological adaptation. For example, Väkevä et al. [83] shows how the challenging gameplay, symbolic narratives, and community support from *Dark Souls* helped players cope with depression. Our work goes further by showing how different games exhibit distinct combinations of game aspects that aid coping, and that this may be a broader phenomenon across game types, with players interacting with varied structural and narrative elements to support them during periods of personal difficulty.

In particular, meaning-focused coping emerged as an important thread across our data, serving as a eudaimonic anchor, facilitated primarily through the mechanisms of Processing Emotions alongside Developing Self Understanding and Reframing Thoughts. Building on research investigating gaming during bereavement [28] and self-care [78], our model illustrates how meaning-focused coping is actively constructed as players re-evaluate real-world challenges through their interactions with games. Prior work has also indicated how players derive meaning from emotional vulnerability [10], character relationships [36], or perspective-challenging narratives [85]. We extend these insights by showing how specific aspects of games catalyse the reflective process across different game types within the context of coping.

Our findings also show that meaning-focused coping does not occur uniformly but through distinct mechanisms in each game. For example, this could manifest as Processing Emotions through the narrative depth of *Disco Elysium*, as Reframing Thoughts through experiencing repeated failure in *Darkest Dungeon*, and as Developing Self Understanding within the low-stakes social interactions of *Stardew Valley*. Rather than being a passive activity, games offer structured environments in which players can revisit, reinterpret, and navigate life's complexities [25, 44, 60]. In doing so, these commercial games serve as comforting and informal self-care resources [11, 23, 76, 78] that players can integrate into their broader wellbeing practices.

Beyond operating independently, our findings show how these mechanisms interact to bridge different forms of coping across games. For instance, the Reframing Thoughts mechanism links meaning-making to problem-focused coping, as game constraints encourage cognitive reappraisal of real-world obstacles [39]. In traditional coping literature, problem-directed action and cognitive reframing are often treated as distinct or sequential strategies [31]. In *Darkest Dungeon*, challenging gameplay marked by constant threats and inevitable setbacks serves as an explicit metaphorical mirror of real-life struggles. Crucially, the player cannot simply reflect; they must actively engage with the game's problem-focused systems to progress. By forcing players to engage with these punishing mechanics, the game offers opportunities for iterative problem-solving and cognitive reappraisal, which can translate to reflection on their current situation. Indeed, prior work by Gowler and Iacovides [38] demonstrates that navigating these uncomfortable gameplay experiences serves as a catalyst for players to reflect on both the discomfort and their personal capabilities. Consequently, players are able to recognise environmental cues, adapt to systemic failures, and

persevere through adversity, fostering a resilient mindset that shapes their engagement with future games and other experiences.

Players also gained significant personal insights through the Developing Self Understanding mechanism. Our work further demonstrates that video games offer players opportunities to confront life's complexities and derive meaning from their experiences [25, 44]. Crucially, this process of self-reflection is facilitated in different ways across games. In *Disco Elysium*, deep meta-reflection is driven by the Narrative and branching dialogue choices, whereas in *Darkest Dungeon*, new perspectives are forged by confronting failure within the Challenge and Progression systems. Additionally, *Stardew Valley* leverages Character Development and NPC Interactions to support social reflection, serving as an informal self-care resource that helps players navigate challenges such as mental health issues or loneliness. By mapping how a mechanism varies across games, our model extends broader conversations about games that explore complex existential, moral, or identity-driven themes [56, 57, 86], demonstrating that self understanding is dynamic and situated in interaction with game elements.

When navigating personal difficulties is too intense, video games influence players' coping through the Seeking Temporary Refuge mechanism, which can serve as both avoidance and emotion-focused coping. While traditional applications of the Coping Circumplex Model (CCM) [79] tend to categorise such behaviours under *Problem Avoidance* or *Hedonic Disengagement*, our findings support the view that not all disengagement is negative [44, 60, 84]. We extend the CCM by demonstrating that digital environments enable a fluid, adaptive coping trajectory. Thus, playing to alleviate immediate stress — a phenomenon thoroughly documented in emotion regulation and mood management literature [35, 69] — acts as a psychological gateway within our model. Rather than being a dead end of passive avoidance, engaging in intentional *Hedonic Disengagement* can scaffold deeper forms of *Positive Emotional Coping*. Tranquil, low-stakes digital environments in games such as *Stardew Valley* can provide the psychological distance necessary for players to process emotions and experiences safely without becoming emotionally flooded, thereby restoring emotional stability in a virtual environment [78] and creating digital sanctuaries [40]. Furthermore, we suggest an additional dimension to healthy escapism [50, 60]: rather than offering a passive escape from reality, video games serve as a structured regulatory loop in which avoidant disengagement is able to subsequently cultivate resilience and personal growth.

Conversely, when players experience powerlessness, video games support coping through Building Competence. This mechanism serves as an emotion-focused coping strategy through which players counter feelings of real-world helplessness by engaging in structured opportunities for achievement and a sense of efficacy. Although Self-Determination Theory [67, 71] was not among the main theories informing the study, it offers a useful lens for interpreting this specific mechanism. Specifically, Building Competence mirrors the psychological need for competence, operating as a virtual compensatory activity when real-world capability is restricted [1, 30]. Building competence was particularly prevalent in the case of *Darkest Dungeon*, where, by focusing on manageable in-game tasks within the game's progression systems, players are able to experience personal mastery through overcoming structured failures.

However, the negative cases in our data highlight the contextual conditions under which the coping loop may break down due to prolonged play or a perceived loss of control. Rather than supporting a deficit view of excessive play, these accounts reveal highly situated struggles. Some participants noted that adverse outcomes could have occurred if gaming had become the primary way of managing stress [5] rather than one of several strategies, supporting the reframing of problematic play as a compensatory meaning-making strategy deployed during periods of heightened real-world distress [46, 49]. Crucially, participants often recognised tension in their own use of games and actively responded by changing game choice, reducing play, or selecting games that

better matched their coping needs. These adaptations suggest that players are well aware of the psychological impacts games have on them and can proactively align their gaming practices with their specific circumstances.

The adaptability we highlight in our data echoes a growing body of research recognising games as versatile coping resources [7, 51, 60]. We extend this discourse by presenting the *Games as Dynamic Coping Systems* model, shifting the narrative of games from static tools to dynamic ecosystems. Our model demonstrates that this process has a recursive feedback loop: the emotional relief, personal mastery, and self-reflection gained within gaming do not remain isolated in the game, but are integrated back into the player's real life and their capacity to navigate periods of difficulty. Fundamentally, games do not passively produce coping or dictate psychological outcomes. Rather, coping is a situated negotiation, co-constructed through the intersection between specific game aspects and the player's shifting interpretations of need, stress, and relief.

By mapping this negotiation, our model delivers a primary theoretical contribution to HCI and Games research, advocating for a deeply contextual understanding of digital play and coping during times of personal difficulty. Rather than treating games as universally beneficial or harmful, our model demonstrates how coping relies on the dynamic fit between player context, game aspects, and the meanings attached to play. Our contribution, then, is not simply to reaffirm that games can help people cope, but to unpack the precise mechanisms by which specific games help in which specific ways, and under which specific conditions.

5.3 Limitations and Future Work

While this study offers a nuanced framework for understanding interactive coping, there are some limitations to note. First, despite sampling for variety, the study drew on participants aged 20–35 from three Global North countries. In line with constructivist grounded theory, the value of this research lies in its contextual depth rather than universal generalizability; thus, our model should be evaluated based on its theoretical fit, transferability, and robustness rather than statistical representation [37]. Additionally, the geographic and demographic scope may have been further compounded by self-selection bias inherent in the recruitment process through platforms such as Reddit, Discord, and Twitter. Because participants responded to an invitation to share their experiences playing specific games during difficult times, the sample may be more skewed towards individuals predisposed to view gaming positively as a coping resource. Future work should more fully explore cases in which gaming may manifest as maladaptive behaviours [11, 34, 73], particularly when players have limited coping resources.

Second, the study focused on three specific commercial games. While these titles highlight the diverse ways games can influence coping, they do not capture the full breadth of the gaming landscape. Other game types or platforms, such as multiplayer or mobile, might offer features such as social guilds or fast-paced action that could support coping in ways not captured by our data. Broadening the focus to other game types would enhance understanding of the model's wider applicability.

Finally, this study provides a cross-sectional snapshot of players' experiences, leaving a gap in our understanding of how game-mediated coping evolves as life circumstances shift. As indicated by theoretical frameworks such as the Transactional Models of Coping and Coping Flexibility [17, 18, 53, 61], individuals are likely to adjust their coping as their emotional states and perceptions of control change during stressful situations. However, in gaming contexts, there is still much to explore in relation to how these adjustments occur over longer periods of time. Further longitudinal research should focus on exploring the temporal aspects of digital play to trace how strategies shift over time.

6 Conclusion

The research offers an in-depth understanding of how video games function as dynamic coping systems for individuals navigating personal difficulties. The study reveals that coping is not a static outcome of isolated features but a dynamic, recursive process shaped by the interplay between player, specific game aspects, and coping outcomes. Using a CGT approach, the investigation conceptualises five principal coping mechanisms: Processing Emotions, Reframing Thoughts, Seeking Temporary Refuge, Developing Self Understanding, and Building Competence.

Participants' accounts indicated distinct coping patterns, with each game influencing coping in different ways. With *Disco Elysium*, players constructed meaning-focused coping through their engagement with its narrative design and complex dialogue choices, driving the Processing Emotions mechanism. In *Darkest Dungeon*, players reinterpreted setbacks and leveraged challenging strategic constraints to foster meaning-focused and emotion-focused coping through Reframing Thoughts and Building Competence. Lastly, players situated *Stardew Valley* as a restorative environment for emotion-focused coping, immersing themselves in low-stakes, structured routines to facilitate Seeking Temporary Refuge.

The key contribution of this research is the *Games as Dynamic Coping Systems* model. By focusing on the interaction between the player, game aspects, coping mechanisms and coping outcomes, the model deepens our understanding of the mechanisms that support coping. The model also shifts the discussion away from generic claims about *games helping people to cope* and toward a more nuanced account of *how* specific games and their respective game aspects become meaningful coping resources in specific circumstances. In doing so, the study shows that video games can do more than distract or entertain: they can support personal reflection, recovery, and resilience during life's most difficult periods.

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