



Designing Games to Challenge the Stigma Around Mental Health

A White Paper By



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What Are The Mental Health Goals Of The Game?



Studio Leads



Developers



Community Managers

What Is Studio Culture?

Whose Story Is Being Told?

How Are Mental Health Challenges Being Represented?

How Is The Topic Of Mental Health Being Explained?

How Is Player Perspective Challenged?

What Is Community Culture?

What Are The Mental Health Goals Of The Game?



Released Games

Game Evaluation: Does Game Meet Goals?
(i.e. Personal Resonance, Increased Openness, Reflection Space)

Introduction

Take This is a non-profit organization dedicated to decreasing stigma and increasing support for mental health in the game enthusiast community and inside the game industry. As a mental health organization in the games space, Take This is uniquely situated to aid developers intending to include themes of mental health challenges in their game by highlighting approaches that both avoid contributing and actively challenging the stigma around them.

In order to assist developers, we have produced this white paper to highlight the numerous ways to approach or design games that challenge the stigma around mental health. In scouring the literature in combination with multiple discussions with developers, we present and discuss the “Using games to challenge the stigma/perspectives around mental health design” framework. Inspired by existing frameworks like Jane Cocks’ Rosetta Wheel (Cocks, 2020) or the Mixing Desk of LARP (Stenros, et al., 2016), we set out for the framework to achieve the following goals:

- 1: Collate current best practices for actively challenging the stigma around mental health
- 2: Provide a tool for developers to evaluate how their game tackles the topic of mental health challenges
- 3: Draw developers’ attention to unconsidered techniques or ideation methods for designing games around mental health challenges



Overall, we hope to inspire and empower developers to meaningfully engage in the topic of mental health challenges. In order to get the most out of the framework, it is important to consider the following question:

What are the mental health goals of our game?

The answer to this question sits on a spectrum from trying to create games for meaningful change to simply wishing to avoid contributing to existing stereotypes around mental health. There is no wrong answer. We actively need games that do both, to not only decrease the stigma but to normalize its inclusion within mainstream games. With this question in mind, it highlights the core intention of this white paper and framework:

- Expand the conversation about how the games industry tackles the topic of mental health
- Empower developers to use the unique medium of games to decrease stigma

But why is focusing on using games to decrease the stigma around mental health challenges worthy of being addressed? Mental health challenges impact countless lives, given that in any given year one-in-five people in the U.S. are diagnosed with a mental illness (National Institute of Mental Health, n.d.). With how prevalent the topic is, when media uses inaccurate portrayals or harmful stereotypes of mental illness it has been found to reduce help-seeking behaviors for those with mental health challenges (Stuart, 2006). We all take cues about our cultural values from the media we consume (Lule, 2016), and given that games are culture artifacts, ones that are becoming increasingly popular with each generation (Perrin, 2018), they have a duty to combat stereotypes or not perpetuate stigma.



Visually, the framework presented is split into four core paths each focusing on a different studio role to highlight the most relevant sections. The roles are: Studio Leads, Developers, and Community Managers. By developers, we mean all members who contribute to making the game from coders, designers, artists, and sound engineers. Each of these role paths include multiple considerations (key topics to focus on around integrating the topic of mental health challenges into the game) and each are fully expanded to include the following information:

- **Description.** This explains what the consideration is, supported with existing literature, and highlights its importance to be considered.
- **Questions to Consider.** We propose a collection of questions, allowing you to ask them about your game and in answering them consider the potential implications on your game's design.
- **Strategies for All.** We emphasize a few actionable strategies to incorporate the consideration into your design.
- **Best Practice Examples.** We conclude with celebrating some games that successfully achieve the consideration. Where possible we include games that focus on mental health challenges, but occasionally games with different themes but suitable approaches are used as an example.

We highlight the considerations because they do two core things:

- 1: They have a direct impact on the content of the game
- 2: When handled successfully they best facilitate the desirable outcomes of the framework.

The desirable outcomes are as follows:

- Does the game allow space for reflection?
- Does the player question their perspective around mental health?
- Does the player have an increased openness with engaging in mental health issues?
- Does the player feel a personal resonance?

Developers should strive to achieve the desirable outcomes because when one (or all) are achieved, they best allow for the opportunity to challenge a player's bias or stigma around mental health challenges. As a developer, if you can confidently claim that your game achieves multiple of these outcomes, then it has the potential to combat the stigma around mental health.

Framework Overview

Considerations

Category	Description	Relevant Role
1. What is the studio culture?	The culture around a studio bleeds through in the game, when unique perspectives are explicitly in the foreground the result is an improved and well-rounded final product. Does your studio promote a culture of transparency?	Studio Leads
2. Whose story is being told?	Ethically retelling stories of mental health challenges requires careful consideration to avoid presenting any harmful stereotypes or further perpetuating bias. Is the game autobiographical or someone's authentic experience? If the latter, how were they involved in the design?	Studio Leads & Developers
3. How are characters with mental health challenges represented?	There are numerous ways to depict someone with a mental health challenge through not only the characters but through themes, settings, and the game's mechanics. Does the depiction of characters avoid imbalanced representations? Are counter stereotypes used or intentional use of tropes?	Developers
4. How is the topic of mental health explored?	There are numerous ways to tackle the topic of mental health. On one side you have how the subject is raised; either abstractly or explicitly. On the other side, there is the game's setting which ranges across fantasy to being based in reality. What is the message we want our game to say about mental health?	Developers

Category	Description	Relevant Role
5. How is the player's perspective challenged?	Challenging how the player thinks or feels is a powerful step to tackling any bias or reconsider their perspective of mental health challenges. What aspect of mental health challenges might the player have not considered?	Developers & Community Managers
6. What is the community culture?	The culture of the community around the game can very much shape the expectations and experiences of players within the game. What kind of community does your game promote?	Community Managers
7. How does the game signal its content & connect to suitable help resources?	Signaling content and providing help resources normalizes both the thoughtful practices and highlighting how it's okay to sometimes need external help. When tackling challenging topics, are the best resources for support available? If included, how exactly can the player access them?	Studio Leads, Developers, Community Managers & Marketing*

* roles depicted with an Asterix benefit from sections of the category rather than its entirety

Desirable Outcomes

Category	Description
1. What is the studio culture?	The culture around a studio bleeds through in the game, when unique perspectives are explicitly in the foreground the result is an improved and well-rounded final product. Does your studio promote a culture of transparency?
2. Whose story is being told?	Ethically retelling stories of mental health challenges requires careful consideration to avoid presenting any harmful stereotypes or further perpetuating bias. Is the game autobiographical or someone's authentic experience? If the latter, how were they involved in the design?
3. How are characters with mental health challenges represented?	There are numerous ways to depict someone with a mental health challenge through not only the characters but through themes, settings, and the game's mechanics. Does the depiction of characters avoid imbalanced representations? Are counter stereotypes used or intentional use of tropes?
4. How is the topic of mental health explored?	There are numerous ways to tackle the topic of mental health. On one side you have how the subject is raised; either abstractly or explicitly. On the other side, there is the game's setting which ranges across fantasy to being based in reality. What is the message we want our game to say about mental health?

Considerations

1. What Is The Studio Culture?

Studio Role	Why is this section relevant?
Studio Lead	Despite a studio culture being made of all its members, those in leadership actively shape the culture through recruitment practices or established feedback structures.

The importance of the surrounding studio's culture cannot be understated because it fundamentally links to the "Whose story is being told?" consideration. When a studio encourages a transparent and supportive culture, it explicitly foregrounds a range of choices from varying perspectives or skill sets. The culture around a studio bleeds through into the game, impacting so many aspects of the content in both explicit and implicit ways.

However, as the state of the industry stands to date there are countless ways in which many studios could improve their culture and avoid the most problematic aspects of normative studio culture. Take This' 2019 report (Take This, 2019) on the state of mental health in the games industry identified numerous negative impacts to an employees' well-being including; job instability, crunch culture, a lack of diversity, and the public's perception of games. All these factors result in increased stress, which in turn can have significant life-long negative impacts on a person's well-being, and significantly reduce their ability to contribute meaningfully to game design and game content.

Of all the contributing factors to an employees' well-being, gender-based harm remains an endemic issue to the games industry. In the past few years, the reports of harassment cases stemming from Riot Games, Activision Blizzard, the streaming and Esports communities, and Ubisoft only proves how this issue is a major hurdle that the games industry must confront. It is imperative to reiterate how, when a diverse range of voices are empowered to speak and be heard, the game, company, and overall community benefit (Hunt et al, 2018).

So, we have identified why a positive culture is important to developing games that challenge the stigma around mental health as well as the possible ramifications of an unsupportive studio culture, but what are some ways that we can improve? First would be to prevent burnout by attempting the following (Bakker and Costa, 2014):

- Managers and administrators should work to identify individual needs of each employee, developing policies to support them where possible
- When a hindrance to work engagement rises, the studio should work collaboratively with employees to overcome these obstacles and listen to constructive feedback
- Increase recovery time, by refusing crunch time, encouraging time off, and promoting a range of social activities for employees to psychologically detach from work

Secondarily, encouraging a supportive culture, which requires a combination of established team trust and proactive measures to prevent abuse, as Emily Greer detailed in a GDC talk (Greer, 2020). They suggest techniques like reducing the power differential between colleagues, encouraging a culture of respect, setting the tone early, and ensuring easier access to leadership. It is even supported by Google that psychological safety is one of the most important factors in team effectiveness (Duhigg, 2016).

These two approaches include a range of techniques to combat problematic behaviors and ultimately lead towards a studio culture where the employees are trusted, and the leadership is trustworthy. Not only do the benefits of positive culture bleed through into the game, but the internalized ideology of letting the right voices speak and ensuring that they're heard, results in a culture of transparency. Everyone benefits in a culture of transparency, particularly on employee well-being, productivity, and retention.

Questions to Consider

- How transparent is our feedback structure?
 - Does each employee have the chance to give feedback to leadership?
 - Do we include a mix of live and anonymous questions?
 - Is our approach to fair pay and advancement clear?
 - Has our harassment policy been recently reviewed and re-released?
 - Do we avoid a culture of VIPs?
- What are we doing to ensure the wellbeing of our studio?
 - Are we sending the right implicit messages about work practices, and about whose ideas & skills are valued?
 - How do we support those in need?
 - Do they feel comfortable to speak their needs?
- How do our recruitment practices combat exclusion and sexism?
 - Furthermore, what are we doing to encourage employee retention?
- Are a varied range of social events encouraged?
 - For those events, how is the potential for peer pressure combated?

Strategies for Studio Leads

Combating exclusion and sexism. Simply by building a diverse team is putting the game first. When you actively combat exclusion, it challenges the existing norms of the games industry in the work environment, leading to products and game content that benefit from a range of perspectives. Diverse recruitment practices are one strong step, but the true goal should be in retention. These practices can be supported by routine ongoing diversity, equality, and inclusion training for all members of the studio.

Encourage a culture of transparency. In a culture of transparency, the employees are trusted, and leadership is trustworthy. Whether through numerous feedback structures and clear accountability across all levels. People should be empowered to speak, and know that they're being heard.

2. Whose Story Is Being Told?

Studio Role	Why is this section relevant?
Studio Lead	Building from the previous section, those within leadership should identify gaps in their recruitment practices to involve the voices of whose story is being told.
Developer	Whether it is telling your own story or collaborating with others to present their lived experience, ensuring it is tackled responsibly is a developer's responsibility.

Games are storytelling devices, capable of placing the player directly in the shoes of someone else's lived experience. There are no doubt countless stories throughout history that would make for thrilling games, but ethically retelling these stories requires careful consideration to avoid presenting any harmful stereotypes or further perpetuating bias. How do you determine whose story you can tell?

One way to know whose story is being told is to tell your own, in the style of countless autobiographical games, such as Zoe Quinn's *Depression Quest*, Anna Anthropy's *dys4ia*, and Mahdi Bahrami's *Farsh*. Loredana Bercuci categorized autobiographical games into four groups: (1) modifications of existing games, (2) mini games, (3) text based, and (4) full-length games (Bercuci, 2017).

However, what about trying to create a game that tells someone else's story? The best and most ethical approach to tell the tale of anyone else is to actively involve them throughout development. Massanari argued that games like *Never Alone* developed by Upper One Games, by continually consulting and using artists from the Iñupiat Native Alaskan community, were following traditional participatory design practices (Massanari, 2015). Participatory design focuses on shifting the designer into a role of a facilitator for the user's experience, rather than the more traditional "dictator" (Spinuzzi, 2005).

There is more nuance to what Upper One Games did, given that they were involving people of a particular culture to tell their stories. The guidance offered by following participatory design practices always needs to be adjusted to best suit the culture or individuals being involved. Following Upper One Games' exact approach for any other topic is not suitable, and more bespoke cultural or social practices should be utilized.

In more recent developments, Janet Kelly put forward four ethical principles for participatory design: (1) free and informed participation, (2) balancing participation with minimizing the risk of harm, (3) maximizing the benefits of the experience and outcomes of participation, and (4) supporting fair and appropriate empowerment (Kelly, 2019).

Looking at *Never Alone*'s design approach and Kelly's principles, we can look to *Hellblade: Senua's Sacrifice* as a case study for telling the story of living with psychosis, involving members from that community, experts, and conducting their participation in a way that minimizes their risk.

In summary, you should aspire to determine whose story is being told as soon as possible if only to identify if other people need to be involved in the design process and how to manage their participation in an ethical manner. Even for games that tell your lived experiences, there may be groups that can relate, who can offer advice to allow more players to establish emotional connections.

Questions to Consider

- Whose story am I actually telling?
 - Is it mine to tell, by myself?
 - If not, tell a different story.
 - Or better yet, support those whose story it is to tell.
 - Does my telling portray things accurately?
 - Will the player be themselves or a bespoke character?
- Is my game telling a story of a particular group of people?
 - How can I involve people with relevant perspectives?
 - Are there any experts on the topic to consult?
- Does the game tell an otherwise unexplored perspective?
 - How can it tackle any existing harmful stereotypes?
- For those participating in the design:
 - Are they informed to the full extent of their participation?
 - Have you done all you can to minimize the risks of harm?
 - What beneficial outcome do they get for their participation?
 - Do they feel empowered to voice their opinions?

Strategies for Studio Leads & Developers

Self-identity exercises. Everyone has their own unique identity, the lens in which they interact with others and the world around them. Taking the time to deeply consider what key factors make up your identity and how you express it can help distinguish what stories you might want to tell. Some exercises include The Game Developer Bag, Things in Common and Identity Molecule (Schrier & ADL Education, 2018).

Prototyping with experts. While not accessible for every game studio, the ability to take early prototypes to experts in terms of representing mental challenges or different cultures, can catch any potentially problematic content early or better guide towards accuracy. Ninja Theory during the development of Hellblade: Senua's Sacrifice documented much of their collaboration with experts throughout development diaries (Ninja Theory, 2016).

Inclusive & participatory development. One constant for games that tell someone else's story, is that it is beneficial to involve them in development from as early as possible. The process shouldn't be one of solely getting their approval, they should be included and actively participate in the development process, and be meaningfully compensated for their participation. In the words of Alan Gershenfeld on Never Alone, "Everything from the art, the story, the development, the marketing, the distribution, has been done together. It's not taking a Native story and putting a license on it." (Kamen, 2014).

Best Practice Examples



Never Alone (Kisima Ingitchuna) - Upper One Games. *Never Alone* is a puzzle platformer that authentically explores the cultural folklore of the Iñupiat Native Alaskan people. Through the development process, the developers stated that they collaborated with nearly 40 Alaska Native elders, storytellers and community members (Games for Change, 2014). In addition, the full interviews with those community members were included within the game as unlockable content to further emphasize how it is their story being told.



An Aspire Life - EnderLost Studios. Sometimes the developers can be the force to tell their own stories, such as *An Aspire Life*, which was developed by a 16-year-old who lives with Asperger's Syndrome. The game has the character confront the challenges that can arise for those on the autistic spectrum. What they do well is broadcast whose story is being told, it is the developer's own experiences: "Everyone with autism is a little different. I did not create the game to be offensive in anyway, only trying to explain what it is like to live with, from my point of view." (Hennessy & Watson, 2018).

3. How Are The Characters With Mental Health Challenges Represented?

Studio Role	Why is this section relevant?
Developers	Representation stems from how the narrative establishes the character traits, how the artists' chooses the environment they're presented in, and how the supporting music or sound design conveys emotion.

There are numerous ways to depict someone with a mental health challenge in the medium of games through not only the characters but through themes, settings, and the game's mechanics (Kowert et al, 2021). Unfortunately, to date the representation of characters with mental health challenges has been lacking, if not downright problematic. The same can be said for mechanical representations of mental illness, as Patrick Lindsey observed the tendency for games to "sanity meters" to quantify a character's mental health status (Lindsey, 2014). It has been documented that exposure to negative media portrayals of mental health challenges can be linked to negative or stereotyped perceptions of the mentally ill (McGinty, Webster, & Barry, 2013).

Samuel Shapiro and Merrill Rotter identified 42 characters portraying mental health challenges across 96 best-selling games from 2011 to 2013 (Shapiro & Rotter, 2016). Of those 42, a total of 29 (69%) were presented as "homicidal maniacs". In the ten years since their work, there have been numerous well-received representations such as Celeste or GRIS, however a systematic review of recent games and their representations is lacking (Ma, 2017).

More recently, to better address the limited research, Dunlap put forward a framework to help identify and categorize existing representations of mental illness. There is a spectrum of representations from (Dunlap, 2018):

- 1: One-dimensional.** Where mental illness is a passing reference
- 2: Two-dimensional.** Where psychopathological features are essential to a character, story or setting but perhaps lack depth
- 3: Three-dimensional.** Where an authentic experience is portrayed

They further outline that there are positive and negative representations in each point on the spectrum; a one-dimensional representation when presented neutrally can normalize the presence of mental illness, but has typically been reduced to "illness in name" which adds little to the story or character development while perpetuating harmful stereotypes.

A small side note: It is useful to not only consider how the characters are represented, but also the setting or environment where they're located. There has been a frequent default in games to tie mental health conditions with "horrific insane asylums" as a cheap backdrop. Much like harmful stereotypes, the same applies to locations as it does for people. For example, while places like the UK closed asylums from the 1960s, modern psychiatric hospitals are clean and safe places to provide intensive treatment for those who need it.

One problem facing attempts to represent characters with mental health challenges is the uphill struggle of overcoming any existing bias or stigma around mental health that the player might have. For example, people can react negatively to attempts of persuasion around stereotypes by doubling down on their beliefs (Corrigan & Penn, 1999). Thankfully, video games may be uniquely positioned to help reduce mental health stigma through the player identifying with a character with mental health challenges (Ferchaud et al., 2020). By virtue of putting the player in the shoes of someone with mental health challenges, or by giving them agency to interact with accurate depictions, any existing stigma or bias can actively be challenged.

Another method to tackle stigma or bias is through promoting empathy, because those who behave empathetically (Wiseman, 1996):

- 1:** They see the world as others see it
- 2:** They are non-judgmental
- 3:** They have an understanding of another's feelings
- 4:** They can communicate this understanding

Much like how Ferchaud et al emphasized the power of identification to tackle mental health stigma, by being able to empathize with someone who has mental health challenges virtually, any bias is reduced. Expanding this further, Matthew Farber and Karen Schrier put forward these eight empathetic design recommendations for game developers:

- 1:** Find ways to support player-to-player and/or player-to-character relationships and build trust and intimacy over time.
- 2:** If you are creating a story-heavy fictional world, ensure there are opportunities for “tension and release” and enable exploration, meandering, and mundane interactions, in addition to pivotal moments.
- 3:** Consider the agency of your player and ability for them to access and make meaningful choices. If there is a lack of agency, make that meaningful as well.
- 4:** Provide opportunities for reflection and bonding, particularly after engaged journeys, whether of mind, heart, or virtual world.
- 5:** Consider novel ways to inspire authentic empathy, care, perspective-taking and openness to ideas and identities.
- 6:** Consider how point of view (first person vs. third person) may affect empathy for players and characters, and design accordingly.
- 7:** Build in ways for teachers, players, and other stakeholders to “make the game” their own, by modifying content and gameplay, accessing the game on different platforms, engaging in communities around the game, and/or designing curricula and activities to take place around and within the game.
- 8:** Find ways to reward players that are not just based on points, money, trophies, and other achievements, but more intrinsic connections, such as care, friendship, emotional catharsis, and closeness (Farber & Schrier, 2017).

The way in which characters with mental health challenges are represented is an important step to begin to combat the existing stigma around the topic. There are countless examples from the past where the media has pushed a harmful stereotype of mental health; now is the time to change the narrative. Especially with the game industry's recent trend towards tackling mental health issues (Parker, 2016) the need for fully developed or neutral non-stigmatized representations increases.

Questions to Consider

- What level of representation am I trying to achieve with this character?
- Are we going to try and systemize a mental health challenge?
 - Does the system avoid the common pitfalls (e.g., sanity meters)?
- Is the character's mental health challenge a defining trait?
- Is this mention of a character's mental illness one-dimensional?
 - If so, is it absolutely needed?
- Does this representation accurately capture the authentic lived experience?
- Is there space to include neutral non-stigmatizing references to mental health?
- How can the player empathize with the character?
 - Is there a way of building trust between the player and character?

Strategies for Developers

Encourage normalised representations. Almost contrary to the previous point, but not all representations of mental health challenges need to be reserved for a main character. Combating the stigma around mental health requires numerous neutral and non-stigmatizing character references to normalize mental health and its ephemera in mundane daily life.

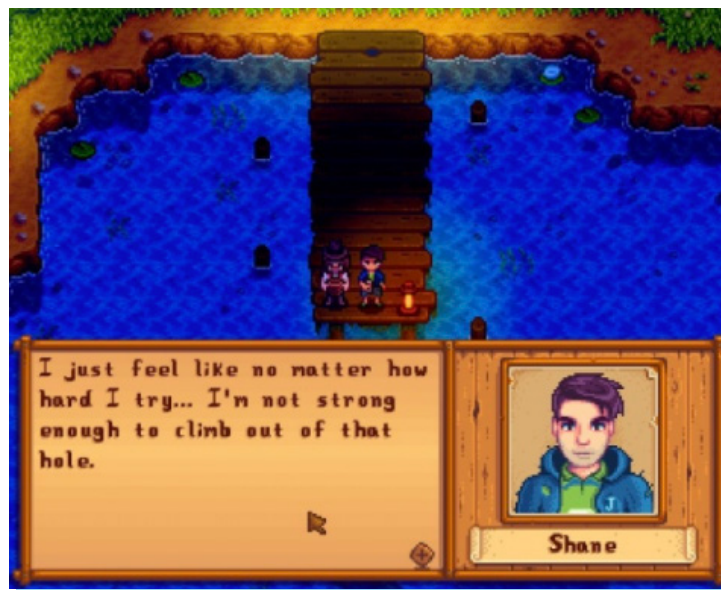
Avoid imbalanced representations. When there is an imbalance or overrepresentation of counter-stereotypical examples, it can reduce the impact of the game's message in addition to making any persuasion attempts to tackle stigma too overt (Flanagan & Kaufman, 2015). There is a careful balance to consider when designing and introducing new characters, especially those with mental health challenges.

Show depth and dimensionality. Some of the best representations to date are those in which a character's mental health challenges are essential and fully realized. Where possible is the character's experience of mental health viewed from multiple perspectives? There are numerous complexities to mental illness to be explored, but they shouldn't need to be stereotyped or sugarcoated (Dunlap, 2018).

Best Practice Examples



Sea of Solitude - Jo-Mei Games. *Sea of Solitude* explores the topics of depression, anxiety, and loneliness through the protagonist Kay. The character's mood is presented through the hues of the sea, while building a three-dimensional character whose quest has her collecting her own life experiences. By having Kay empathize with the struggles of her family, the game highlights how mental health can be represented in both protagonists and supporting characters.







Stardew Valley - ConcernedApe. *Stardew Valley* includes a wide diversity of characters to interact with around town, where over the course of the game the player can further develop relationships with them. Numerous of these characters experience mental health challenges from Shane managing his depression or Kent's passing mentions of PTSD. The widespread representation of non-stigmatizing two and three-dimensional characters is why *Stardew Valley* is a best practice example.

4. How Is The Topic Of Mental Health Explored?

Studio Role	Why is this section relevant?
Developers	From highlighting what the themes of the game are to how exactly they're presented in game, both are huge factors in how mental health challenges can be explored. In addition, the systems of a game support the exploration of themes or topics. Mental health can be explored through mechanics or systematic representation, these require careful consideration to handle things tastefully.

There are numerous ways to tackle the topic of mental health that can be best split into a two-by-two grid. On one side you have how the subject is raised; either abstractly or explicitly. Abstract mentions often leave it up to the player to interpret to see the connections to mental health, whereas explicit mentions can directly point to the topic at hand. Then there is the game's setting - ranging from a fully fantastical world to a fully realistic one. Is the player faced with human beings in houses or fantastical creatures in whimsical locations?

	Abstract Subject Matter	Explicit Subject Matter
Fantasy Setting	 <p data-bbox="620 1228 753 1262">Papa & Yo</p>	 <p data-bbox="1183 1228 1317 1262">Persona 4</p>
Realistic Setting	 <p data-bbox="651 1722 724 1755">Train</p>	 <p data-bbox="1138 1722 1365 1755">This War of Mine</p>

Both these factors, the setting and the subject matter, shape the entire experience of the game and have considerable ramifications on how the topic of mental health can be raised. From the table of games above, we can see the range of games possible, from the fantasy abstraction of a boy and his abusive father in *Papa & Yo* to the intended realism of living in a besieged city in *This War of Mine*.

Games have long been tools to both promote prosocial attitudes (Kaufman & Flanagan, 2015) and deliver arguments with their systems to shift player beliefs (Bogost, 2010). Within the field of embedded design, Geoff Kaufman and Mary Flanagan believe that persuasive content is best delivered covertly to enable a more receptive mindset in players. This means that if you're actively trying to change how people think about mental health, abstracting the subject matter or using a fantasy setting might be the most impactful way to go about it. One downside to handling a topic abstractly or covertly is that the player cannot necessarily provide informed consent when the game's subject matter is hidden from them, but with suitable disclaimers ahead of time this can be mitigated.

On the other hand, being more explicit with the subject matter allows the player to confront their own feelings on the topic or relate with their own experiences (Bopp et al., 2016), often prompting internal reflection (Bartsch, 2012). This experience may lead to negative emotions, but multiple studies have found that in emotionally moving games players still enjoy the experience even if they feel guilt or sadness in the moment (Bopp et al., 2015).

However, a more explicit approach has a greater potential to be met with the player resisting any attempts of persuasion (Knowles & Linn, 2004). This resistance appears in one of three typical ways: reactance (where people drive to reassert one's independence), counterarguing (generating thoughts that dispute or are inconsistent with the persuasive argument), and perceived invulnerability (the belief that one is uniquely immune to negative consequences) (Oliver et al., 2016).

Overall, all the options detailed in how to tackle the topic of mental health shouldn't be viewed as opposing alternatives, but differing opportunities that can be complementary when used together. There are games across the spectrum, but the recommended implementation for your game all stems back to your intentions to actively challenge the stigma or simply not contribute to it. As an exercise, consider the answers to the following questions to see what techniques might best suit your game.

Questions to Consider

- What is the message we want our game to say about mental health?
- What combination of fantasy/realism or explicit/abstracted is our game?
 - What would happen if we swapped the setting?
 - How directly do we want the player to confront the topic?
- Is the topic of mental health core to our game's theme?
 - Is the game generally serious or lighthearted?
 - Is the game based in reality or fantasy?
- Is mental health systemized in any way?
 - If so, how have we ensured it has been thoughtfully handled?

Strategies for Developers

Intermixing content. If you tackle mental health alongside a topic that distracts attention away from the subject, it can assist in making the original topic more approachable (Kaufman & Flanagan, 2015). You could look at *Persona 4*, the way that the topic of a character's mental health is frequently intermixed with combat or other aspects of gameplay.

Obfuscation. If attempting to actively tackle the stigma around mental health, any aspects to conceal the persuasive intent of the game can assist in preventing player resistance. *Train* is a perfect example of obfuscation, where the true intent of the game remains hidden until the message of the game's mechanics falls into place (Kaufman & Flanagan, 2015).

Repetition. When trying to directly tackle a player's bias or perceived stigma of a topic, repetition is a key ingredient to reversing any ingrained beliefs (Devine, 1989). In certain games this can be more challenging, however in combination with previous strategies such as intermixing content, each time the topic is raised is repetition.

Best Practice Examples



Papa & Yo - Minority Media Inc. *Papa & Yo* is an example where the topic is both abstracted and placed within a fantasy setting. There are references to the real world, but by taking the topic of living with an abusive parent and using a representative monster, the topic is initially easier to approach. The game's subject matter becomes more apparent as the game progresses but approaching the game for the first time the emotionally challenging aspects of the game remain obfuscated.



That Dragon, Cancer - Numinous Games. In an example that highlights how to explicitly tackle a sensitive topic, *That Dragon, Cancer* cleverly blends between realistic and fantasy settings to aid with the telling of its story. In addition, intermixing the game's topic with moments of levity or gameplay paces the game nicely.

5. How Is The Player's Perspective Challenged?

Studio Role	Why is this section relevant?
Developers	From highlighting what the themes of the game are to how exactly they're presented in game, both are huge factors in how mental health challenges can be explored. In addition, the systems of a game support the exploration of themes or topics. Mental health can be explored through mechanics or systematic representation, these require careful consideration to handle things tastefully.
Community Managers	In an integral supporting role, managing the expectations of the community has a huge impact on what expectations or perspectives the players have long before they even begin playing the game.

A perspective challenging experience is one that presents something in order to challenge the way someone thinks or feels about a topic. Games have all manner of ways to challenge the player's perspective; from presenting new or conflicting information about characters, presenting emotionally challenging topics, or even breaking the fourth wall (Whitby, et al., 2019). More eudaimonic (thought-provoking) experiences are considered by players to be a worthwhile activity in itself (Mekler & Hornbæk, 2016) in addition to satisfying needs for deeper insight and personal growth (Bartsch & Hartmann, 2017).

Challenging a player's perspective prompts reflection, which is a crucial component of learning (Mekler et al., 2018) and can lead to attitude or perspective change. This interpersonal change is often referred to as a transformative reflection, as the individual's (i.e., reflector's) original point of view is altered or transformed to consider the new perspectives they just explored (Fleck & Fitzpatrick, 2010). Reflective transformations are difficult to achieve because they involve a shift in a person's existing biases and/or misconceptions (Baumer, 2015).

There are three key components to transformative change: a breakdown (involving surprise, uncertainty, or conflict), inquiry (involving a re-examination of existing knowledge), and transformation (involving an active change of knowledge; Baumer, 2015). It is difficult to design for transformative reflection; however, tactical game design can evoke the first component of this model. The experience of surprise, uncertainty, and/or conflict can lead a player to their own inquiry of experience and, consequently, reflective transformation.

Games are well equipped to challenge a player's perspective, because they include all manner of uncertainty or conflict as well as grant the player agency to try proposed solutions, and give them feedback to reflect on their consequences (Khaled, 2018). But how do we include these aspects in our games? Rilla Khaled put together four insightful approaches to reflective game design:

- **Questions over answers** - Games that promote reflection aren't about providing players with clear-cut, singular solutions, and more about creating opportunities for players to explore multiple possibilities and re-imagining problem framings.
- **Clarity over stealth** - Focusing on clarity, allows for conscious learning instead of accidental learning. It can be ideal for the player to know what they've learned.
- **Disruption over comfort** - A perspective challenge is as the name suggests, a challenge that sometimes isn't strictly comfortable. In order to tackle unconscious bias, they need to be brought into the limelight.
- **Reflection over immersion** - We need the player to reflect on themselves, regardless of if it pulls them out of the game experience in order to self-reflect.

One way in which reflection can be placed at the core to best challenge the player's perspective is through the mechanics embodying the message of the game (lovingly called ludonarrative harmony). However, it is worth noting that past examples of using mechanics to represent mental health challenges have not always been handled tastefully, the most egregious example being "sanity meters" that quantify how "crazy" a character is. Depression Quest represented depression through a decreasing number of options, emphasizing how challenging it can be to do anything while feeling depressed.

There are multiple factors that shape a player's perspective towards a game long before they even begin playing. One way that developers can guide their player's expectations is through careful marketing. There is a sweet spot to aim for where the player knows what to expect with the game, but there is still space for pleasant surprises or subversions of those expectations. Detail what perspective is desirable for the player to have, and shape the marketing towards those intended expectations.

Fundamentally, perspective challenges should hold up a mirror (in the form of new or conflicting information) to the player in hopes that as they reflect, they change their thoughts or feelings. The techniques mentioned above are just a few ways to go about it, but sometimes the best we can do is present the challenge to what the player thinks or feels, nudging them in the right direction and hope for the best.

Questions to Consider

- What aspect of mental health challenges might the player have not considered?
 - How can we broach these topics?
 - What perspectives around mental health can be challenged?
- What expectations or life experiences might the player have coming into the game?
 - What might they be unaware of that we can highlight?
- Are there any existing game tropes to lean into to later subvert?
 - How can the genre be subverted?
 - What about the presentation of characters?
- How can we present information that reframes past events?
 - Can a mechanic be repurposed to mean something else?
 - Can any abstracted themes become explicit temporarily?
- From our marketing alone, do players know what experience to expect?
 - If not, how can that change?

Strategies for Developers & Community Managers

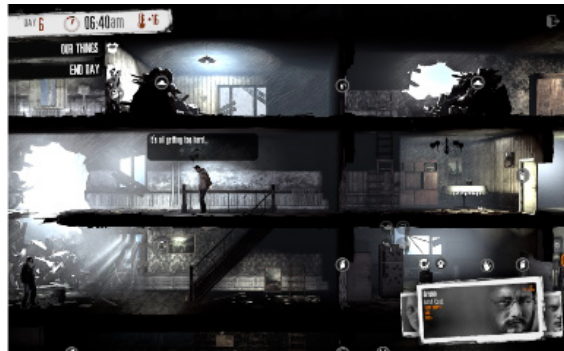
Design for challenge not change. Changing someone’s perspective isn’t easy. However, one way to change a perspective is to first challenge it. Once someone is presented with something that challenges the way they think or feel, it can begin to nudge them in the right direction, and eventually change their perspective.

Aim for intended expectations. The way in which the game is presented in marketing can set the player’s expectations for the game, themes, even the community around the game. One way to go about challenging perspectives is to subvert expectations. If you can cultivate an expectation going in, you’re essentially placing the rug under the player’s feet to whip out from under them later.

Questions over answers. A key part to perspective challenging experience is the period of reflection that follows being presented with conflicting information. Reflection isn’t about “correct solutions”, instead it should raise questions about mental health challenges for the player to reflect on, to be self-aware and critical about what they’d experienced (Khaled, 2018).

Mechanics is the message. Games are unlike any other media, what they have uniquely over films or books, is their interactivity. This should be empowered to make the mechanics embody the game’s message (Brathwaite & Sharpe, 2010). This requires being designed or intended from the very start, and careful consideration to avoid “gamifying” a mental health challenge.

Best Practice Examples



This War of Mine - 11 Bit Studios. *This War of Mine* presents the realities of living through war as a civilian, by putting you in the shoes of these people you’re forced to make difficult choices that raise unconsidered topics. The perspective challenging experiences that the game provides all stem from its ability to provoke empathy while raising difficult moral questions.



The Beginner’s Guide - Everything Unlimited Ltd. *The Beginner’s Guide* covers a range of topics from trying to discern designerly intent, parasocial relationships and mental health. It can challenge the player’s perspective on what it means to be a game, holding a mirror up to their personal relationships, and opinions towards the game’s narrator (which happens to be the developer too).

6. What Is The Community Culture?

Studio Role	Why is this section relevant?
Community Managers	The strategies inside are best utilized by those with a finger on the pulse of the community, who can shape the tone and expectations of the players.

Before the game is out and even following its release, the culture of the community around the game can very much shape the expectations and experiences of players within the game. If we want to build games capable of challenging the stigma around mental health, then the community around the game needs to echo that sentiment loud and clear. However, a positive community culture needs to be cultivated over time, there are no “get rich quick” solutions or strategies for communities mostly because each and every community is unique. And it should be treated as such, with bespoke solutions.

One of the best ways to see what can be achieved in a supportive community is to look at exemplar communities. Victoria Tran, the Community Developer for Kitfox Games, identified that the type of game has a huge influence on the tone in the surrounding community (Tran, 2019), giving a few examples of what sort of ethos is developed as follows:

- **Mastery.** An ethos around comprehensive knowledge or skill in a subject or accomplishment
- **Competitiveness.** An ethos around having a strong desire to be more successful than others
- **Kindness.** An ethos around friendliness, coziness, generosity, trust, or inclusion dynamics

Typically speaking, if you’re building a game that challenges the stigma around mental health, you’d want to foster a community of kindness; where trust, friendliness and inclusion are at its core. So the important question becomes, how do we achieve that?

Yet again, Victoria Tran has given all manner of insight on designing communities for kindness (Tran, 2020). To summarize their community expertise, you design for kindness by establishing rules that set the boundaries between players and developers as well as define acceptable ways of communication. Much like with a studio culture, there needs to be some innate trust between those running the community and those within it; based on integrity, openness, action, and intimacy. And lastly, setting the tone of a home-like feeling in which people feel seen, heard, valued, and benefit from their relationship with the community.

Despite the best intentions, at times a toxic member or aspect of the community can emerge and it is important for the overall community’s safety to crack down on it firmly. From a study by Eshwar Chandrasekharan et al, they studied the effectiveness of banning hateful communities on Reddit (Chandrasekharan et al., 2017). They identified that through cutting out the most toxic communities, those users either left the community or drastically reduced their hate speech usage, meaning other communities didn’t inherit the toxic individuals. What this shows is that when toxicity reveals itself, it is for the betterment of the community as a whole to cut it out or ban it altogether.

Ultimately, there are countless benefits to establishing a kind community from offering a safe space for people to discuss the impact of your game, to translating it across with future game releases. Plus, it cannot be understated the impact a supportive community can have on the development process, on team morale, and cultivating an environment that can truly tackle the stigma around mental health.

Questions to Consider

- How have we set the tone for our community?
 - What expectation should anyone have when joining the community?
 - Does this match the expectation we want?
 - How is the community talking about our game?
 - Is this the kind of community I would want to be part of?
- What is our approach to moderation?
 - Does the community feel welcomed?
 - Are our rules robust enough to be consistently enforced?
 - Do the moderators feel empowered to make decisions?
 - Additionally, do they feel supported if they have to make a tough call?
 - What is the community's opinion on the rules?
- How do the developers interact with the community on personal accounts?
 - Should this be mimicked within our community?

Strategies for Community Managers

Setting the tone of the community. As people join your community, the way the developers and other players communicate with each other sets a standard for others to emulate. If that is a safe space for people to share their experiences with the game, relay feedback on aspects of design, or generally hang out in a low pressure environment, how the initial tone is set will have a knock on effect throughout the community.

Consistent moderation. Establishing the rules of your community and consistently enforcing them, shapes the accepted behavior of the community. How that moderation is applied sits on a spectrum of approaches ranging from subtle to explicit, but the key is consistency to establish trust.

Cutting out the toxicity. There may be a point where toxicity rears its ugly head within your community, but there shouldn't be hesitancy to outright cut it out. The longer it exists, the higher chance it has to nudge the community's tone in a negative direction.

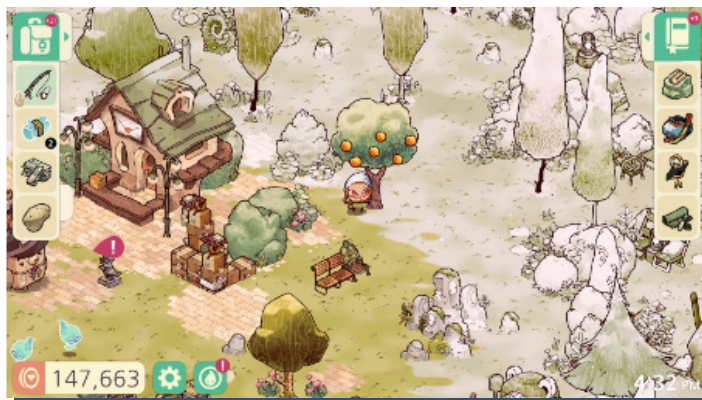
Best Practice Examples



Among Us - Innersloth. What makes *Among Us* a good example is mostly due to Victoria Tran's efforts to build a community of kindness around the game (as we've detailed above). The game is also a fascinating insight into a community gathering around a game to support its resurgence, shaped to put positivity first.



Animal Crossing: New Horizons - Nintendo. With the recent installment to the *Animal Crossing* series, Nintendo continues to develop the warm and welcoming atmosphere. From treating social media as being handled by in-game characters, to in-game mechanics that support collaboration, *Animal Crossing* does a fantastic job to extend the game's tone into its community. Much of the community established around *Animal Crossing* is player driven, either through online communities around the game or players establishing networks with friends, which has proved invaluable during the pandemic (Zhu, 2020).



Cozy Grove - Spry Fox. Another example of the community around a game being built on a foundation of kindness would be *Cozy Grove*. Plus, with recent additions of tools to share screenshots or player's discovering recipes to share amongst friends, the players within the community are actively reinforced to help one another.

7. How Does The Game Signal Its Content + Connect To Suitable Health Resources?

Studio Role	Why is this section relevant?
Studio Lead	Seeking out and knowing which helpful resources best suit the themes of your game, ensuring that those who reach out will actively benefit from doing so.
Developers	When creating aspects of the game, developers have a duty to highlight potentially harmful or distressing aspects of the story being told. For considering how exactly skippable content can be integrated systematically, to more advanced text detection. These systems play a supporting role in protecting players.
Community Managers	In setting the expectations of the community for what is included within the game, as well as ensuring the suitable help resources are frequently highlighted.

On the surface, having resources in your game to assist those experiencing mental health challenges only provides care for users rather than challenging the stigma around mental health. But it actually does both, by normalizing both the thoughtful practices and highlighting how it's okay to sometimes need external help.

One of the most accessible ways to signal the content of the game, as well as highlight any suitable help resources is through open disclaimers or advisory screens. These content warnings can clearly inform players about the themes they can expect to encounter. Ideally, these will be included both in the game's store page and when opening the game. In a publication from Payton Jones et al, they identified that trigger warnings were not helpful for trauma survivors (Payton, et al., 2020). However, while content warnings may not help individuals with trauma during the experience, it does still provide an opportunity for people to self-moderate and choose to opt out of the game altogether.

Beyond content warnings, the option of providing skippable content is rarely utilized in games and when it is, the context is focused from an accessibility perspective. However, as Mark Brown and Sky LaRell Anerson remark, game developers in 2019 typically attempted to make their games as accessible as possible, but there is still much to improve on (Brown & Anderson, 2020). If you are aware that your game tackles challenging topics around mental health (to the extent that it falls into a content warning), you would make your game considerably more accessible to make that type of content skippable or toggleable.

There are numerous methods for identifying what content to provide warnings for or opting to make it skippable, and this is where testing for blockers comes into play. Deanne Adams, an Xbox Researcher, defines blockers as anything that prevents the player from playing the game from accessibility or feelings of discomfort (Adams, et al., 2021). They suggest some ways of identifying pain points through the use of playtesting or narrative accessibility exercises. Deborah Hendersen and Todd Kelley delivered a fantastic talk on operating narrative accessibility workshops, noting how they can be implemented with narrative beats, script read-throughs, animatics, or full rendered cutscenes. There are steps to identify potential blockers at every stage of development (Hendersen & Kelley, 2019).

Overall, inclusion of these features protect the players from negative experiences, ones that can be easily avoided if they were more informed. By taking further measures, it can give players the agency to better control their experience and opt out of challenging content, potentially allowing players who would otherwise be blocked to engage with your game. And lastly, inclusion of any previously mentioned techniques assists in the process of normalizing their inclusion in all games, for the betterment of all.

Questions to Consider

- What aspects of mental health challenges does our game tackle?
 - Are these topics mentioned in a content warning?
 - Is there anything we haven't mentioned, but we should?
- Are there any foundations or charities focused on this topic?
 - If so, what resources do they point to?
 - Do they use up to date resources?
- For potentially harmful content, is it absolutely necessary for the game?
 - Can it be toggleable for a personalized experience?
 - Is this content suitably foreshadowed or warned?
 - Is it shocking for the sake of shock? Can it be bypassed, or an alternate route provided?

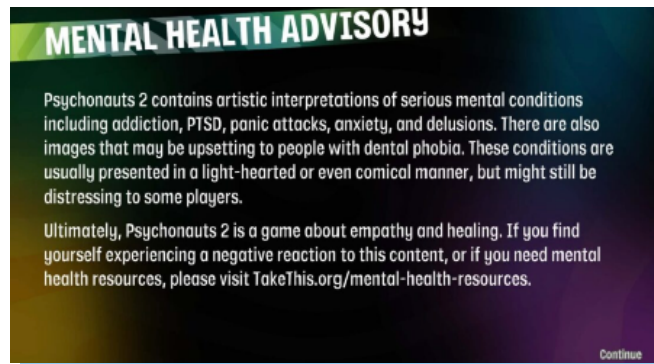
Strategies for All

Content warnings & direct links. As the bare minimum, including content warnings to inform and let people self-moderate is critical, especially when it comes to the topic of mental health. These warnings should have active engagement, meaning the player should have the opportunity to read over them and press "continue" to consent to play or choose to leave. One step further is identifying appropriate help resources, so those who find themselves affected know where to go.

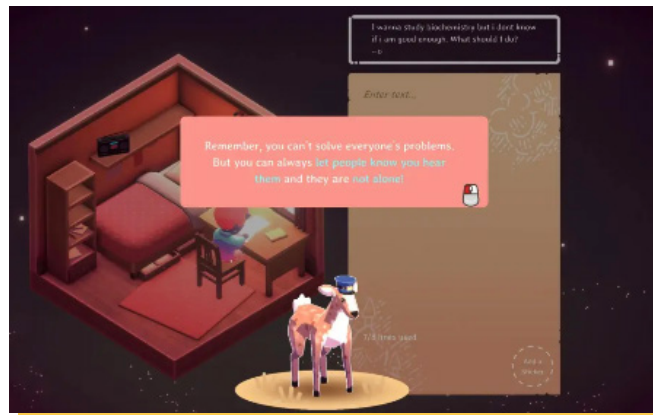
Skippable content & testing for blockers. When including content in your game that you know has the chance to be harmful, for the safety of players there are numerous ways to include skipping options or make that type of content toggleable. Knowing when and what to provide skippable content relies on identifying potential blockers early through playtesting or through narrative usability exercises.

Text detection and interventions. If your game has text input, such as communication between players or a community, putting in detection for key terms or phrases regarding mental health can allow for targeted interventions to at the very least point individuals to possible helpful resources.

Best Practice Examples



Psychonauts 2 - Double Fine. In the recent release of *Psychonauts 2*, Double Fine presented the above content warning before the game begins. Not only does this mental health advisory screen suitably normalize these warnings in mainstream games, as well as foreshadow the game's content, but they provide suitable links to further mental health resources.



Kind Words - Popcannibal. In a game all about sending messages to people going through tough times, *Kind Words* does a fantastic job of allowing mental health struggles to be normalized, where people who may not encounter these difficulties can see how it impacts others. Not only are there explicit warnings of potential content from other players, but there is a combination of text-detection and moderation in place to direct users to helpful resources.

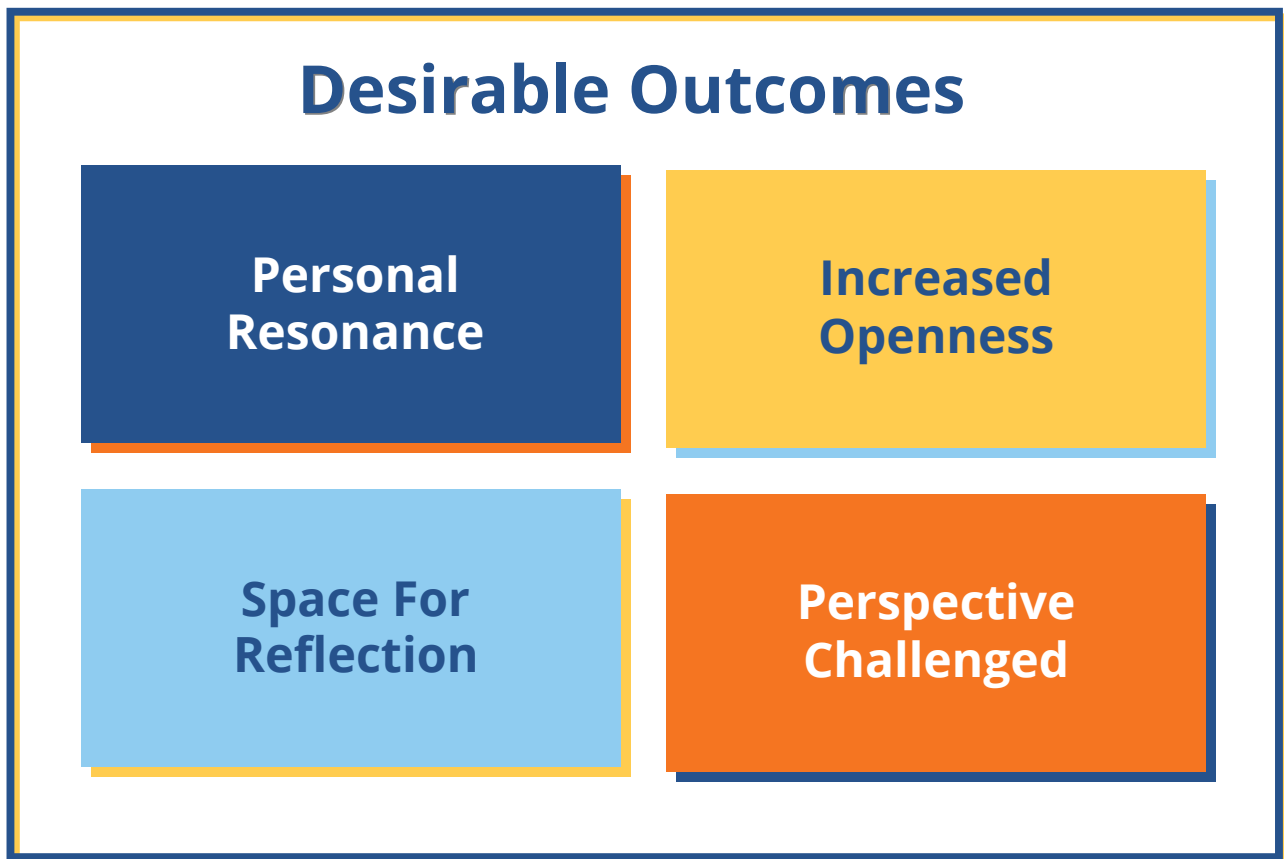


Boyfriend Dungeon - Kitfox Games. From a care of users standpoint, *Boyfriend Dungeon* stands out in two areas. First they have toggleable content, where the player can choose if they receive supportive messages from a "Mom" character. Secondly, based on community feedback they updated the game's content warning (Kitfox Games, 2021).

Desirable Outcomes

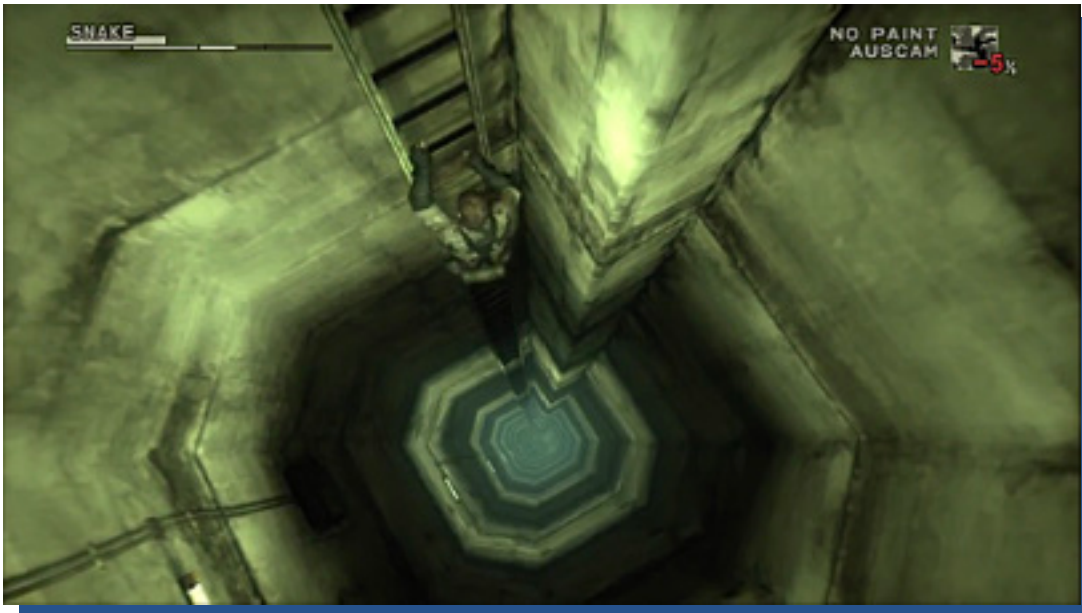
All these considerations we've spoken about impact the content of the game, and when done successfully can enable one (if not all) of these desirable outcomes. These outcomes are desirable simply because they all increase the possibility of actively challenging the stigma around mental health.

Of the four desirable outcomes, they can be split into two categories; internal and external. Space for reflection and a player's personal resonance are both internal to the game, based on if the player has that connection or reflective experience. Whereas for external, both outcomes of increased openness and a perspective challenge are what the player takes with them away from the game. Both categories are still worthwhile, but seeing where the outcome is experienced helps in understanding the phenomena.



Space For Reflection

In some of the previous considerations, we highlighted how reflection is a key part of learning and typically follows after being presented new or conflicting information. If we desire to challenge the stigma around mental health challenges, we need to not only present conflicting information but give the player enough time to ruminate on it. In discussions with numerous developers of emotional games, Alena Denisova et al found that designers considered it essential to set the stage for both being open to interpretation and equally having the narrative understood (Denisova, et al., 2021). This balance is to carefully walk the line between providing the player space to reflect, or being explicit.



But what does space for reflection look like in practice? To give an example, there is the ladder sequence in *Metal Gear Solid 3*, where following a boss fight you are made to climb a seemingly endless ladder, in a silence that shifts to orchestral music. This lull in the action is one way to allow space for reflection, for the player to consider what has been and what might be ahead.

Player Questions Their Existing Perspectives Around Mental Health

Changing people's bias or attitudes is exceedingly difficult, however we continue to reiterate that the first step is to raise questions and prompt some introspection. By the virtue of raising questions, it instigates the player to begin to re-examine their past experiences or concepts (Moon, 1999). Perspective challenging experiences in games appear in all shapes and sizes from narrative twists, emotionally challenging topics, mimetic mechanics, and action consequences (Whitby et al, 2019). The connecting factor is that these challenges target attitudes towards mental health challenges, perhaps by presenting a lived experience or letting the player embody someone.

In an ideal situation, the player would reflect and realize that their existing perspectives towards mental health were authentic and considered. However, for players who are biased or believe negative stereotypes around mental health, by raising conflicting information they hopefully question why they believed what they did and correct themselves going forward.



While not on the topic of mental health challenges, the game buffalo is all about combining cards to get players to think quickly of famous figures. In the studies conducted using the game, it revealed that players actively worked to avoid being biased and generally lowered their prejudices (Flanagan & Kaufman, 2016). It forces the players to question their perspectives on stereotypes and similarly actively combat any implicit biases.

Player Has An Increased Openness With Engaging In Mental Health Issues

Games have the potential to evoke higher-level transformative or critical reflections in their players, however these are infrequently achieved as reported by players (Mekler, et al., 2018). What is more common is experiences of endo-transformative reflection, basically reflections relating to the game or games themselves (Whitby et al., 2019). This desirable outcome bridges the two, where the player's experience leads to transformative reflection beyond the game and towards mental health issues in their lives.

In some part then, the experience around mental health challenges should strive to encourage the player to feel a sense of openness. Being open-minded can be viewed as being aware of your flaws as a believer, while acknowledging the possibility that anyone else who believes anything, could be wrong (Riggs, 2010). An attitude of open-mindedness promotes tolerance, to consider the perspective of others, and lean towards a mutual understanding.



This outcome is exceedingly hard to design for. However as Doris Rusch puts it, there are games that have the power to transform us on a deep, existential level (Rusch, 2020). In the paper, Rusch includes a letter written by Sophia (15-years old at the time) to Jenova Chen (a developer behind *Journey*):

“Your game practically changed my life (...) My father passed in the Spring of 2012, only a few months after his diagnosis. (...) In my dad’s and in my own experience with Journey, it was about him, and his journey to the ultimate end, and I believe we encountered your game at the most perfect time (Takahashi, 2013)”

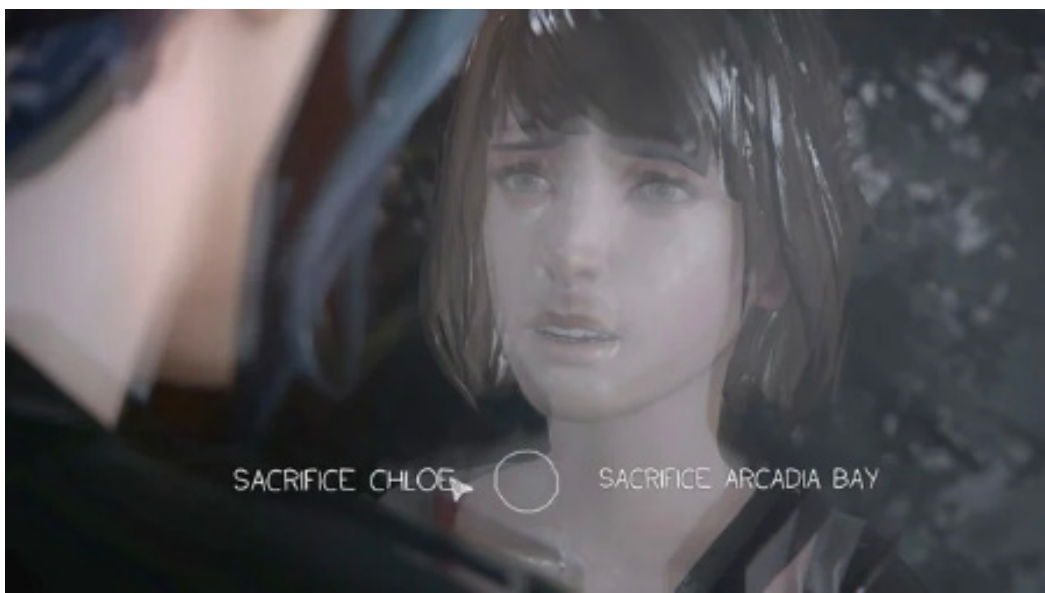
When games have the potential to help individuals be more open and accepting towards the topic of mortality, then there is no doubt that they can achieve the same for attitudes towards people with mental health challenges.

Player Feels A Personal Resonance

A personal resonance is an experience that has a special meaning, or is particularly meaningful to them. As Ryan Rogers et al found, players identify a game as meaningful when it allows a connection to characters in the game, story of the game, or choices made in the game (Rogers, et al., 2017). There are countless ways to help a player connect emotionally to a character, Julia Ayumi Bopp et al managed to identify seven forms of emotional attachment by speaking with players (Bopp et al., 2019). There were;

- 1: Cool and Capable** - Empowered and excited about a in-game capabilities
- 2: Respected Nemesis** - Respect and awe towards the character
- 3: Admired Paragon** - Admiration for the character
- 4: Crush** - Being infatuated with the character
- 5: Concern for One's Protege** - A sense of responsibility for the character
- 6: Sympathetic Alter Ego** - Player shares personal experiences
- 7: Trusted Close Friend** - A feeling of trust and gratitude

Aside from narrative elements, games afford the player control, relatedness, and agency via choices (Ryan et al, 2006). A meaningful choice is one where individuals can choose among options autonomously, while understanding what these choices entail (Patall, et al., 2008). Iten et al identifies that players believe they have meaningful choices in games when they include three core elements; moral, social (involving other characters), and being consequential (Iten, et al., 2017).



Life is Strange is a perfect example of a game that facilitates a personal resonance through both the player's connection to characters and providing ample opportunity to make meaningful choices. This highlights that sometimes a combination of personal connections can be more impactful than any single one.

Additional Considerations + Honorable Mentions

Throughout the development of this framework, we identified over twenty factors when discussing with developers about what can challenge the stigma around mental health. Over numerous iterations, we started to group the considerations into related categories. But we quickly identified that many of these topics fell under design best practices, meaning that any strategies we'd give weren't unique to the topic of challenging stigma. So, while they weren't included in the framework, they've been compiled below as honorable mentions, because they all can contribute to tackling the stigma around mental health.

General		
Feature	Description	Questions To Consider
How is the game presented in marketing?	Much like "how the topic of mental health is explored", how the game is presented shapes the player's expectations. Is the theme of the clearly presented or intentionally obfuscated?	<ul style="list-style-type: none"> • Is mental health at the forefront of the game? <ul style="list-style-type: none"> • Is this clear through the game's marketing? • Do we include suitable content warnings? • Did the game follow participatory development practices? <ul style="list-style-type: none"> • How can this be heralded in marketing?
How is audio included within the game?	The voices of characters, ambient sounds and soundtrack can both contribute to emotive experiences.	<ul style="list-style-type: none"> • How does the audio currently support the emotional experience of the game? • Do players engage with the voices or music of the game?
What are the visuals of the game?	The look of the game, from the world, UI elements, characters, ect.	<ul style="list-style-type: none"> • Is the game striving for realism or fantasy? • Are players responding to the visual representation of a character?

General

Feature	Description	Questions To Consider
How much agency does the player have to impact the game?	Agency is the player's ability to impact the game through their choices or actions.	<ul style="list-style-type: none"> • Does the player feel they have full agency? • Can the agency be restricted for effect?
What are the player's expectations?	All players are coming into the game with certain expectations, they can be based on anything from genre, gameplay, marketing, past experiences ect.	<ul style="list-style-type: none"> • What expectations do we want the player to have? <ul style="list-style-type: none"> • How can we set these expectations early? • Alternatively, what expectations do we want to avoid? <ul style="list-style-type: none"> • What can we reveal to avoid this expectation?
How does the game collect data analytic points?	Most games can have data analytic tools inserted in order to collect information about the player's interactions or choices in the game.	<ul style="list-style-type: none"> • Is data collected on player drop off points, engagement, or choices made within the game? • At what stage in development is this data collected? <ul style="list-style-type: none"> • Can it still be acted upon?

Multiplayer

Feature	Description	Questions To Consider
How much agency does the player have to impact the game?	Agency is the player's ability to impact the game through their choices or actions.	<ul style="list-style-type: none"> • Does the player feel they have full agency? • Can the agency be restricted for effect?
What are the player's expectations?	All players are coming into the game with certain expectations, they can be based on anything from genre, gameplay, marketing, past experiences ect.	<ul style="list-style-type: none"> • What expectations do we want the player to have? <ul style="list-style-type: none"> • How can we set these expectations early? • Alternatively, what expectations do we want to avoid? <ul style="list-style-type: none"> • What can we reveal to avoid this expectation?

Framework Case Study - Hellblade: Senua's Sacrifice

Now that we've gone over the framework in detail, one of the best ways to see its feasibility and usefulness is to take an exemplar title and see how it achieves or misses some of the design guidelines mentioned. We've mentioned it previously, but time to take a deep dive into Ninja Theory's *Hellblade: Senua's Sacrifice*. To get the most out of this section, is it recommended to have played or have knowledge about to understand remarks about the studio, narrative, or mechanics.



Considerations

There is so much that goes into the design of a game, particularly one that handles the topic of mental health challenges. We begin by looking at the *Hellblade: Senua's Sacrifice* through the lens of our design considerations, highlighting how it answers those questions and what strategies Ninja Theory adopted (if at all).

1. What is the studio culture? Unfortunately, some aspects around both the studio and community culture are less applicable in this example because either the information isn't publicly available, or the studio doesn't have a community focus. It is challenging to answer "What is the studio culture?" around Ninja Theory without being involved. We can speculate on past and present employee reviews just as we can look at the games developed, however they lack insights for a complete understanding of the studio's culture.

2. Whose story is being told? Ninja Theory successfully identified that they alone were ill-equipped to tell the story of someone with psychosis. In order to remedy this, taking a participatory approach by collaborating with numerous experts, consulting with the Wellcome Trust, and directly listening to accounts from people with lived-experiences of psychosis. This combination of approaches allowed for an authentic presentation of living with psychosis, while directly tackling the stigma that stems from a lack of understanding.

3. How are mental health challenges represented? On the representation front, Ninja Theory did well to present the protagonist Senua with notable depth and dimensionality. Psychosis is depicted in a humanizing manner that doesn't shy away with the negative aspects of living with a mental illness. *Hellblade* features a small cast of characters which avoid an imbalanced representation, most notably Senua's family who appear superimposed into the game world in visions or passing audio. Senua's mental health challenge is given further dimensionality when interacting with those other characters, like Druth who relates to Senua with his own experiences.

4. How is the topic of mental health explored? Of the three strategies we suggest for exploring the topic of mental health, *Hellblade: Senua's Sacrifice* manages to incorporate aspects of all three of them. The focus on living with psychosis is intermixed with bouts of combat or narrative beats, that help those moments where mental health challenges are in the spotlight more approachable. The spotlight is repeatedly placed on Senua's mental health challenges, raising the topic again and again.

Plus, by leaning into a blending of realism and fantasy, by incorporating mythos from Celtic and Norse cultures, it adds another layer of intermixing. Lastly, the topic of mental health challenges is somewhat obfuscated, spoken about through metaphors of “darkness” or “rot”, which for players unaware of the game’s focus they might not perceive the game as attempting to persuade them about the stigma around psychosis.

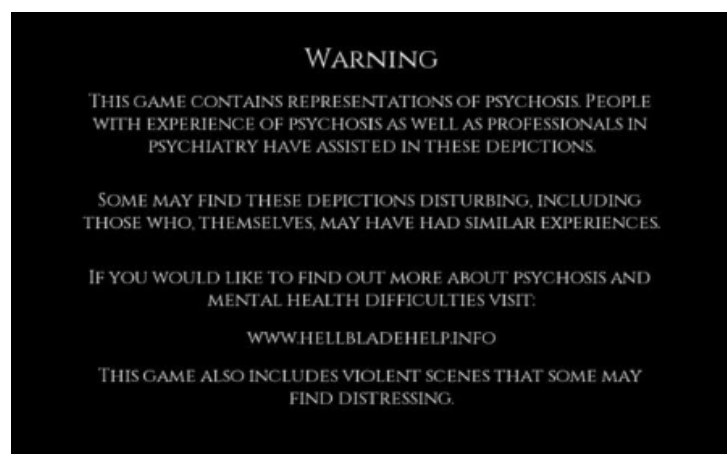
5. How is the player’s perspective challenged? There are a few ways in which the game attempts to challenge the perspective of the player, building from the intentional obfuscation of the combined Celtic and Norse mythology, the game never provides concrete answers, instead prompting questions and trusting the player to make their own interpretations. In addition, the presentation of Senua’s experience with psychosis is presented authentically to simply challenge any misconceptions the player might have.

Whereas on a mechanical front, the game presents a “permadeath mechanic” where it states that if the player dies enough times represented by a visual rot that covers Senua’s body, their save data will be deleted. It was revealed that no such mechanic exists, but by implying that it does shape the player’s expectation. Connecting the player’s fear of losing their save with Senua’s experience highlights how the mechanics (false or otherwise) can better convey the game’s message, while providing the opportunity to challenge the player’s perspective.

From as early as their E3 2015 trailer, Ninja Theory presented Hellblade: Senua’s Sacrifice as an exploration through the lens of someone experiencing mental health challenges. Not only does this inclusion help normalise broaching the topic in mainstream games, but it establishes the intended expectations of the player coming into the game. They become aware that they’re going to experience a game about mental health challenges, and by virtue of that awareness become more open to having their perspective challenged.

6. What is the community culture? One way in which Ninja Theory cultivated a positive community culture was through transparency, frequent development blogs allowed people to gain an insight into the techniques or developers involved in creating the game. In addition, their forefronting of engaging with medical professionals and people with psychosis assists in normalizing the processes. However, there are no official communities surrounding the game for players to gather, which might not be Ninja Theory’s priority given the single-player nature of the game.

7. How does the game signal its content and connect to suitable help resources? On “How does the game connect to suitable help resources?”, Hellblade features a prominent content warning in the game’s description and splash screen when opening the game, the latter predominantly directs players to a website (www.hellbladehelp.info) which offers region specific support links to those who seek it out. The game doesn’t however feature the features to allow players to skip content or toggle certain features to better personalise their experience. Unfortunately, even the game’s cutscenes are unskippable.



Desirable Outcomes

Now that how *Hellblade: Senua's Sacrifice* tackles all the design and external considerations has been covered, we could turn our attention to if the game managed to achieve any of the desirable outcomes. Despite *Hellblade: Senua's Sacrifice* being a shorter game experience, taking between five to eight hours to complete (based on numerous YouTube full-playthroughs), they still find time to incorporate Space for Reflection. There are numerous sections of the game in which the player guides Senua on a raft or log. These moments are perfect examples of allowing space for reflection. Both narrative and gameplay lulls to offer the player a chance to ruminate on what has happened and what is to come. The quiet combined with the additional audio effects to recreate psychosis, assists in steering the reflection towards mental health challenges.

The three other desirable outcomes are focused on the many players' individual experience, meaning for a case study we cannot assume every player experienced the desirable outcomes. However, we can simply turn to the dozens of positive reviews written by players across Google to get an insight into just a handful of player experiences:

"One of the best games I've ever played. Their depiction of schizophrenia is about as accurate as you can get in a video game, from the pattern recognition to the visual and audio hallucinations. I really like that there isn't anything on the screen besides Senua-- no minimap, no waypoints, no health bar, just voices in your head. This makes it incredibly immersive. Using good headphones is an absolute must to get the full effect of the binaural audio. This game is so incredible, it even inspired me to take psychology classes so I can one day help people like Senua to defeat their inner darkness and help them to lead a normal life."

"It does well covering psychosis issues as well as being visually striking. It is very well balanced, unique in its overall design, and takes a unique interpretation of Norse mythology through the eyes of a young woman battling schizophrenia and bipolar depression. Well if I remember correctly it's bipolar depression. Living in those times with psychosis, but having it treated as being possessed feels very illuminating and paints the times in a way that makes it feel a lot more understandable as we think of various people who were treated the same throughout myths and history."

"The effects and sounds are so perfectly mixed together that it pushes all of your senses to the limit simultaneously to pull you into the story. During the time I was playing this, I WAS the lead character. I was Senua. I felt what she was feeling and I wanted what she wanted and I understood what she knew."

From just these three reviews, we can interpret some of the comments as the player's alluding to an experience that questioned their existing perspectives around psychosis, increased their openness towards the issue, and achieved a personal resonance with *Hellblade*. Obviously, these are only a handful of reviews, but given the positive reception the game received, it wouldn't be inappropriate to conclude that for some players the game successfully tackled the stigma around mental health.

Summary

Hopefully the process of breaking down the core aspects of *Hellblade: Senua's Sacrifice* and how it aligns with our framework highlights concrete examples of using the suggested strategies. It is important to stress that this is just one approach to successfully exploring the topic of mental health challenges, and, despite the praise, the game and the studio are not infallible. As an exercise to gain a better understanding of the framework, you can take another game and see how it achieves (or doesn't) the key strategies we highlight.

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